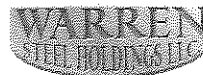


Today's Date: 2/15/17
Site Name: Warren Steel Holdings
ID Number: 04 ~~2~~ R 000 007.773
Date(s) of Documents: 2013
Type(s) of Document: RERA Enforcement

Sensitive: CBI Room NIA Enforcement Sensitive (Red Folder) NIA

Submitted by: Jamie Paulin

Comments: _____

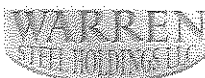


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Warren Steel Holdings

9/17/13 | Overlaid EH & S Parag
Over Pyl EH & S

Baghouse - South &

Maintenance Down

toppy Over Pyl - 7-8 months
Heer - Runs the baghouse.

~~OSF~~ - Imports Part of Property
SMG Scrap Fungus - off-line
↳ Baghouse will be off
↳ Liquid Spray
↳ then Alloy

Stein - Process

BE → MFG - Joe Ford doesn't know what they do.

200 Employees -
↳ shifts 3 shifts - 24-7
↳ The team sit down

Wash the
Process 160
Baghouse > Dust

→ 1001 Process:

3 Fans
- 36,000 CFM

2 Fans - ~~BAF~~
LA

16 modules - Baghouse
228 Bags per module
Running 11 Modules -
5-down for repair

Same duct Work →

Reuse Air Bags to
Clean it

↳ Dust was down to
100ppm - closed boxes

↳ Picked up boxes
& Expired some - pick up
boxes

5 Boxes - collect Boxes
from ~~litter~~

- One box at a time.
2-2 1/2 boxes per day

22,000 lbs per box

10-14 tons - Haul out on
a day

Enrichment -

~~ME~~ Disposal - Final
Disposal

14 Tons

34,000 lbs

less 9%
zinc 9-10%
zinc

6 Box - Enriched
Not an open
box

Eye Ball amount has
going into box

Auto mate shut off
if boxes are replenished.

- Furnace was down
before about 5pm last

1998 - Furnace. ESC

- Same air handling
system

WOT - early 1990s

200,000 lbs per quarter

\$130,000 per month - disposal

1-2 lbs of lig tons come
off as dust generation

< 1 Pkg week - 12 hours
shut down

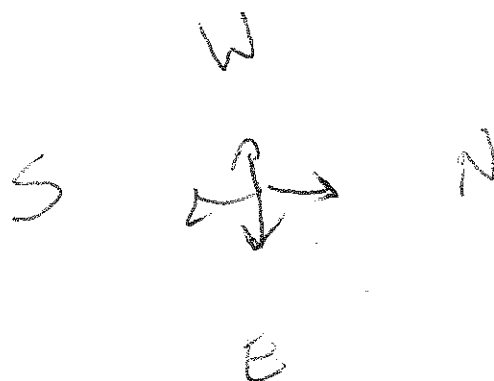
12-24 hours per week

WJ
Treatment
Plant

Re-binding as
needed

EAT - consumes pro
- factory Bud

Vashwa Woods
Area



- a mo
2010 -

Con
Conc

- 10 - 2

↳ Phen
Blm

2011
2012

Makina
Lm NPD
↳

- a month ago - a - bricked it
2010 - analyzed - per day
What's it?

Can't analyze dust here.
Conchial Labs

~~20,000 hrs per~~
8 200 hrs dust
per month

- 10-20 boxes per month

↳ Pneumatic Joints → Airseal
↳ Blow off the bottom

2011 - lat } Synthetic to
2012 - lat } boxes from
 pneumatics

Melvin
Linn NPDI
↳ Kuznetsov
Bo

Tim Man

Bay Wa
at air

Dust
onto d

100 A

WWT

→ Inge
↳ Nat Sm
before

Unum

↳ No lake
↳ the

2/29/12

Q

a

Tim Marleneo.

Bag Waste Labels - Missing
Date of Accumulation - Missing

Dust could drift
onto drive pad

100 ft back of
the ~~Waste~~ the 5

WWT Plant

→ Inspection
↳ Not sure when they inspect
before

Unburned Waste &
Emitters -

↳ No label & Accum date
↳ too far mark

Amica Waste Mgt
↳ Non-Haz - Filter -

↳ Envr em

↳ Wttr - Process - Water

Rain Lagoons
~~Wttr~~

800 gal per mi -

dis ip Hvy

fiberglass - polymer -

charin - slits - settle

out solids - suspended

solids

3 months - Heavy Metals
~~EPA~~

- 9.2 pH

- Mahoning River - the

- Back to system - the

Stain

send up
anal put
back

Brick

↳ Burn it back
into furnace

Training

SD
Perovskite
Wind

→ No annual Training
Annual Cons - Training in
2/13 2/8/13

→ No written description

→ They can't remember when
training was last done.

9/18/13 Bars
Squares

copper mild \rightarrow steel power
in

↳ Kentucky Electric Steel

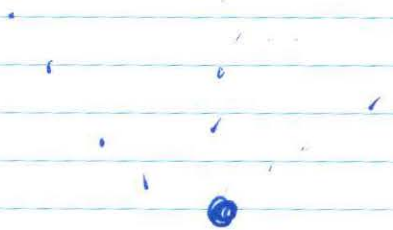
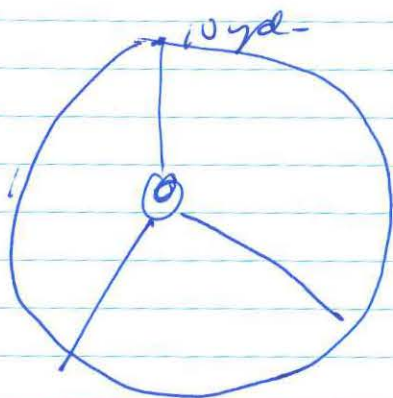
↳ ↳ square bars -

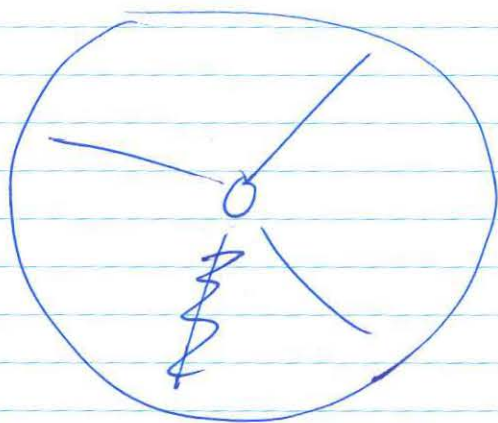
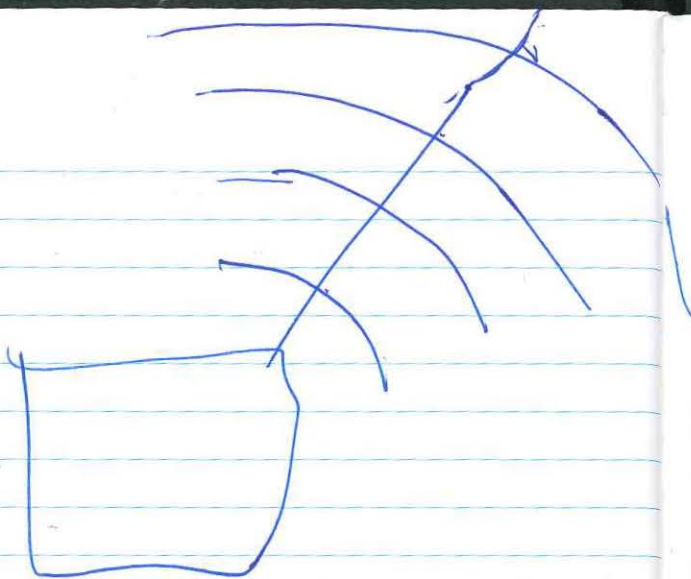
plates bars -

widens out

\rightarrow industrial chain
links

↳ John Scheel
COO





| Production Area | Description | Area Requested From | Date Received | EPA Document Number | CBI Claimed | Pages Obtained |
|-----------------|--|---------------------|---------------|---------------------|-------------|----------------|
| General | Emergency Action Plan | Records | 9/17/2013 | JI-ws-01 | No | 21 |
| General | Site Location Map | Records | 9/17/2013 | JI-ws-02 | No | 1 |
| General | Facility Layout | Records | 9/17/2013 | JI-ws-03 | No | 1 |
| General | Manifests of K061 to Michigan Disposal from 8/23/13 to 9/7/13. | Records | 9/17/2013 | JI-ws-04 | No | 16 |
| General | MCS Environmental Laboratory Warren Baghouse Dust, dated, 3-1-07. | Records | 9/17/2013 | JI-ws-05 | No | 2 |
| General | CEL Cardinal Laboratories, Inc. Laboratory Analysis Report for Sludge Press Cake, dated, 3/28/2012. | Records | 9/17/2013 | JI-ws-06 | No | 3 |
| General | Michigan Disposal Waste Characterization Report for K061 Electric Arc Dust, dated, 3/12/07. | Records | 9/17/2013 | JI-ws-07 | No | 3 |
| General | Storm Water Pollution Prevention Plan, Prepared by Horizon Environmental Corporation, dated, 9/1/11. | Records | 9/17/2013 | JI-ws-08 | No | 24 |
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SI-WS-01

Inception Date: 8/1/2011
Revision #: 001
Revision Date:

WARREN STEEL HOLDINGS LLC
SAFETY POLICY

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Title: EMERGENCY ACTION PLAN

1. PURPOSE

- 1.1. This Contingency Plan is intended to provide general and specific procedures for reacting to different types of emergencies that may be encountered at Warren Steel Holdings (WSH) and provide for the safest and most efficient method to protect and where necessary, to evacuate employees from the plant and account for all employees quickly.

2. RESPONSIBILITY

- 2.1 The **Safety Manager** is responsible for the development of this written program, to provide training, provide assistance to the department Supervisors/Managers, audit the effectiveness of this program and make changes as needed. All Supervisors/Managers are responsible for implementing and enforcing this policy.
- 2.2 **Supervisors/Managers** are responsible for enforcing this policy and ensuring that all employees that they supervise shall know, understand and are trained on this policy. Supervisors/Managers who oversee contracted work, shall ensure that contracted employees fully understand this policy and abide by it. Each dept. Supervisor/Manager is responsible for accounting for all assigned employees, personally or through a designee, by having all such employees report to the predetermined designated assembly point and conducting a head count. Each assigned employee must be accounted for by name. **All Supervisors/Managers** are required to report their head count (by name) to the Emergency Coordinator.
- 2.3 **The Emergency Coordinator** is responsible for overseeing emergency response activities, directing personnel and coordinating with emergency services in the event of an emergency situation. The **Emergency Coordinator** shall be the highest ranking official on-site with knowledge of operations and maintenance functions. **The Emergency Coordinator shall only be needed if the situation is deemed uncontrollable by Supervisors/Managers.** It is critical that employees know who the **Emergency Coordinator** is and understand that this person has the authority to make decisions during emergencies.

3. GENERAL

- 3.1. In the event of an emergency, it may be necessary for Maintenance and/or Production employees to remain on-site to operate critical plant operations before they evacuate. This may include shutting off electrical or gas supply lines, machines, equipment, etc.
- 3.2. If an emergency situation arises, all Maintenance and Production personnel shall report to their assigned assembly areas as quickly and safely as possible
- 3.2.1. All employees should be accounted for at this time by their immediate Supervisor/Managers.
- 3.2.2. Each Dept. shall report by radio to the **Emergency Coordinator** of the final headcount for their Dept.
- 3.2.3.1 In the event an employee(s) cannot be accounted for, as long as conditions permit, teams of 2 will search the area. If conditions are IDLH (Immediately Dangerous to Life a Health), emergency services shall be relied on to search the area for the unaccounted employee(s).
- 3.2.3. Job tasks shall be assigned in teams of at least two (2) or more employees.
- 3.2.4. Job tasks will be assigned by the **Emergency Coordinator** or designee in the event of an emergency.
- 3.2.5. Radio communication shall be maintained during the completion of the job tasks.
- 3.2.6. Upon completion of a job task, all employees that were assigned job tasks shall report back to their assigned assembly area and report to their Supervisor/Manager.

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- 3.3. When emergency officials, such as the local fire department, respond to an emergency at this plant, they will assume responsibility for the safety of building occupants and have the authority to make decisions regarding evacuation and whatever other actions are necessary to protect life and property. The highest-ranking responder will assume the incident commander role and will work with the onsite Emergency Coordinator, but will be responsible for directing all response activities.

4. TYPES OF POSSIBLE EMERGENCIES

- 4.1. The following is a list of the types of possible emergencies:

- Medical
- Fire
- Explosion (Molten Steel)
- Electric power lines down
- Power Outage
- Gas leak
- Fuel Spill
- Chemical spills
- Tornado/Severe Weather
- Violence in the work place
- Ladle/Furnace/Tundish Breakout
- Bomb Threat
- Radiation
- Hazardous Waste Spill

5. REPORTING PROCEDURES

- 5.1. All emergencies are to be reported immediately to the Supervisor in charge. The Supervisor is to immediately determine the necessary response and if necessary, contact Security by two-way radio communication on channel three (3) or by dialing x7085 on any plant phone or 330-847-7085 if using an outside line with instructions depending on the circumstances.

- 5.1.1. The Supervisor is to explain in detail what the emergency is and the location for emergency response services to report to. The Supervisor or designee shall escort emergency services to the scene of the emergency from the Security gate.

- 5.2 In the event that a Supervisor cannot be located immediately, employees are to contact Security by two-way radio communication on channel three (3) or by dialing x7085 on any plant phone or (330) 847-7085 from an outside line and notify any Supervisor as soon as possible. The employee should provide as much detail as possible to Security.

- 5.3 Security shall go to go to channels 1, 2 and 4 repeating the following on each channel. **"WE HAVE AN EMERGENCY WITHIN THE PLANT PLEASE GO TO CHANNEL THREE"**.

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5.4 Then return to channel three (3) and announce the following. **"WE HAVE A PLANT EMERGENCY, PLEASE FOLLOW INSTRUCTION ON CHANNEL THREE"**, then contact the appropriate staff members (Refer to Appendix A for the Emergency Contact List).

5.5 Supervisors are to monitor channel three (3) and only communicate as need per the emergency.

5.6 Security shall contact the appropriate emergency services and provide the following information: (Refer to Appendix B for contact information for Emergency Services)

Street Address: Warren Steel Holdings
4000 Mahoning Ave. NW
Warren, Ohio 44483

5.7 Type of Emergency

5.71 Location within the plant of the emergency

5.72 Any other needed information that will assist emergency services.

5.8 In the event of an emergency when the plant is down, Security will contact the appropriate services as needed and the Emergency Coordinator/ designee and management, as applicable, from the emergency contact list.

5.9 When Security has been contacted that the emergency is over they will announce **"OUR PLANT EMERGENCY IS OVER PLEASE RESUME NORMAL COMMUNICATIONS"**.

6. MEDICAL EMERGENCIES

6.1 All injuries shall be reported to your immediate Supervisor.

6.2 In the event of a **MAJOR INJURY** follow all above reporting procedures as outlined in **SECTION 5**.

6.3 All production shall cease where feasibly possible and the area shall be secured with red danger tape.

6.4 If there is any doubt about the medical condition or the possibility of additional harm if moved, the injured employee is not to be moved until properly trained personnel arrive on the scene. The injured person shall be attended to and comforted until emergency services arrive.

6.5 The Supervisor shall take the following action:

6.51 Contact Security by two way radio communication on channel three (3) or by dialing x7085 on any plant phone or 330-847-7085 if calling from an outside line.

6.52 Inform Security that you have a **"MAJOR MEDICAL EMERGENCY"**

6.53 Any time that a major medical emergency is announced over the radio, all other radio communication shall cease on channel three (3).

6.54 Security will request the following information from the Supervisor

- Injured parties name (if known)
- Injured parties approximate age
- Type of accident that occurred
- Suspected injuries (if known)
- Location of injured employee

6.55 Security will then dispatch emergency services to the facility.

6.56 Security will block open the front gate to permit emergency services to enter without delay.

6.57 The Supervisor or designee will meet emergency services at the Security gate and direct them back to

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the scene of the emergency.

6.58 The EHS Manager and appropriate Management Staff shall also be contacted as soon as possible.

6.59 An accident investigation will be conducted by the appropriate personnel as soon as possible.

6.6 Only properly trained individuals will clean up blood from an accident.

7. FIRE EMERGENCIES

7.1 The outbreak of a fire requires immediate and precise action by all employees. Small fires or incipient fires can be usually be put out quickly by employees trained in the proper use of fire extinguishers. Never place yourself in harm's way without an escape route.

7.2 Appropriate fire extinguishers are located throughout the plant.

7.3 Any time a fire extinguisher is discharged, the Supervisor shall complete an incident report focusing on corrective action to prevent future fires. The Supervisor or designee shall replace fire extinguisher(s) as soon as possible, but no later than the end of the shift.

7.4 All employees shall be trained in appropriate use and type of fire extinguishers upon initial employment and annually thereafter.

7.5 If a fire is too large or cannot be contained by the use of fire extinguishers, then follow all above reporting procedures as outlined in **SECTION 5**.

7.6 Employees shall report to their Depts. designated assembly area to be accounted for by their Supervisor/Manager if a fire is deemed too large to contain and emergency services are needed to handle the emergency.

7.7 Fire fighting systems

7.71 Fire hydrants are located throughout the facility.

7.8 When the fire department arrives, they are to be advised by the Emergency Coordinator of the area of the plant affected, the type of fire, and any hazardous chemicals in the area. The fire department is to take control at this point and all employees are to stay clear of the area and out of the way of emergency services personnel unless requested.

7.81 Action and communication with emergency services will be conducted by the Emergency Coordinator.

7.9 Re-entry into any building will not be allowed until the area has been determined safe to re-enter by emergency services and the Emergency Coordinator.

8. EXPLOSION (MOLTEN STEEL)

8.0 If the EAF is going to explode, exit the floor immediately. Do not try and save the day!

8.1 Emergency pouring locations shall be maintained to ensure a location for molten steel in the event of an emergency with the ladle and or ladle slide gate or any other situation that may arise that requires the dumping of a ladle of molten steel.

8.2 If the pouring locations are utilized, steel should be removed as soon as possible to ensure a location for any additional molten steel.

8.3 Scrap steel shall be maintained free of moisture, snow and ice prior to charging the furnace. In the event that moisture, snow or ice are observed, hold the scrap over the furnace for an appropriate amount of time before emptying the scrap into the furnace.

8.4 In the event of a molten steel spill that is deemed uncontrollable, the Emergency Action Plan shall be activated.

8.5 Know and understand department standard operating and emergency procedures.

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9. ELECTRICAL LINES DOWN

- 9.1 Electrical lines' being knocked down is a possibility and can cause the potential for a serious shock, electrocution or in extreme cases explosion.
- 9.2 In the event of an electrical lines being knocked down, follow all above reporting procedures as outlined in **SECTION 5**.
- 9.3 In the case of electrical power lines down, all employees are to clear the area, and the area shall be secured to prevent access with red danger tape that totally encompasses the area.
- 9.4 If necessary, employees will be required to evacuate if there exists a danger of fire or explosion.
- 9.5 The Maintenance Manager or designee will assign the electrical dept. to immediately shut-off the appropriate power supplies.
- 9.6 Under no circumstances are employees to try to extinguish an electrical fire.
- 9.7 The fire department is to be called and advised of the situation prior to proceeding to the location.

10. POWER OUTAGE

- 10.1 In the event of a power outage, the following procedures shall be followed:
 - 10.1.1 The Emergency Action Plan shall be activated if an emergency situation exists.
 - 10.1.2 The Emergency Coordinator (or designee) shall coordinate the removal of crane operators from crane cabs. Aerial lifts shall be utilized to assist in the removal of the crane operator from the crane cab.
 - 10.1.3 The aerial lift operator will take a full body harness and a double retractable lanyard to the crane operator. The crane operator will wear a full body harness and maintain 100% tie off when going from the crane cab to the aerial lift basket.
 - 10.1.4 If the crane cab is not accessible by aerial lift, the Fire Dept.(911) shall be contacted to remove the crane operator from the cab.
- 10.2 Emergency exits signs and emergency lighting shall be maintained and inspected monthly to ensure they are in good working order.
- 10.3 Fire hoses shall be inspected monthly to ensure they are in good condition.
- 10.4 The fire dept shall be called and informed of the situation at hand and be prepared to respond if needed.
- 10.5 Fire hydrants shall be unobstructed to ensure there accessibility at all times.
- 10.6 In areas of insufficient lighting, employees shall not enter without proper illumination equipment such as flash lights, emergency lighting, light plants, flood lights, etc.

11. GAS LEAK

- 11.1 Natural gas or flammable propellant leaks are always a possibility and could lead to a serious explosion.
- 11.2 In the event of a gas leak follow all above reporting procedures as outlined in **SECTION 5**.
- 11.3 The Supervisor will immediately review the situation and ensure appropriate action is taken to correct the leak immediately.
- 11.4 If necessary, the Emergency Action Plan shall be activated. Access to the area shall be restricted by taping off the area with red danger tape and all sources of ignition are to be kept clear of the area.
- 11.5 The Maintenance Manager or designee is to ensure the shutoff the appropriate gas valves and electrical circuits.
- 11.6 If necessary, Maintenance or the Safety Department shall use the confined space gas detection unit to identify the source of the gas leak.
- 11.7 Employees are only to return to the area after Maintenance has ensured the leak has been repaired and

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the combustible gas meter shows no hazard of flammable gas exists.

12. CHEMICAL SPILL

12.1 It is important for all employees to be familiar with the types of chemicals used at Warren Steel Holdings. The Hazard Communication Program (Right to Know) provides all employees with information on the types of chemicals and the hazards of each. If in doubt, obtain the MSDS for the chemical in use.

12.1.1 All employees shall be trained in chemical hazard communication per 29 CFR 1910.1200 and shall be trained that they do not attempt to contain or clean up hazardous materials spills unless they have received specific training. These employees shall be trained to contact appropriate supervisory and emergency personnel whenever a hazardous materials incident occurs or is likely to occur. In addition, employees shall be trained on the site Emergency Action Plan and their role in it.

12.2 In the event of a chemical spill follow all above reporting procedures as outlined in **SECTION 5**.

12.3 Security shall contact the Emergency Coordinator (or designee), EHS Manager (or designee) and appropriate management. A determination must be made as to whether it is a non-emergency spill or an emergency spill. A non-emergency spill is one consisting of NON-Hazardous Material that can be controlled or cleaned up safely in the local area without risk to the individuals doing the clean up. In these situations, the Emergency Coordinator (or designee) shall determine action and ensure appropriate action is taken.

12.4 The Emergency Coordinator shall immediately identify the character, exact source, amount, and extent of any released materials and shall log all pertinent information, including estimated quantities of spill that resulted from the incident and obtain the Material Safety Data Sheet(s) to obtain detailed information on the chemicals that have spilled.

12.5 Whenever there is an emergency situation which presents imminent or actual harm or danger to human health or the environment, the Emergency Coordinator (or his designee) shall activate the Emergency Action Plan and shall notify Shaffer Industrial Services by contacting their 24 hour response hotline (330) 847-2992.

12.6 All employees shall be evacuated from the area of the spill.

12.7 The area shall be secured with red danger tape to restrict access to the area.

12.8 Non-Emergency Spills

12.8.1 The Emergency Coordinator shall determine if the spill is small enough to contain, control and clean up. Generally, spills of one cup or less can be wiped up with paper toweling or absorbent spill kit materials. Spills of approximately one gallon can be cleaned up with spill kit materials such as spill socks, pads, or absorbents. Spills of highly hazardous material in any size may require emergency cleanup from an outside resource.

12.8.2 The Emergency Coordinator shall coordinate the use of the necessary emergency equipment for non-emergency spills. If the spilled material is flammable or volatile, shut off flame sources and naturally ventilate the area if it is safe to do so. If possible, protect floor drains or outside access areas from the spill. Restrict access to the spill area to prevent further access and potential exposures by taping off the area with red danger tape. If any employees were exposed to the spilled material, use emergency eye washes or showers for at least 15 minutes and get to a well-ventilated area and refer to the MSDS for necessary first aid measures should be taken.

12.9 If necessary, properly trained personnel shall utilize the appropriate personal protective equipment and:

12.9.1 Close valves and/or shut down pumps.

12.9.2 Use spill pillows, spill socks, rags, sand, floor dry, dirt, etc. to contain the spill or release.

12.9.3 Use available containers to catch small leaks if possible.

12.9.4 Divert the flow away from any drains, catch basins, or manholes by using the above listed

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materials.

12.9.5 For leaking drums, rotate the drum so the leak can be stopped.

12.9.6 For flammable material, eliminate all potential ignition sources immediately.

12.9.7 After the spill has been cleaned up, place absorbent materials and materials that have leaked, into a properly labeled and sealed safety container or drum .

12.10 Emergency Spills

12.10.1 In cases of large spills, ones that cannot be isolated quickly, or an emergency spill of a highly hazardous chemical or an UNKNOWN chemical; all employees are to clear the area immediately. If conditions exist which require possible evacuation of the area, the facility Emergency Coordinator will initiate the Emergency Action Plan. The local Fire Dept. shall be called (reference emergency contact list) and advised of the situation. The Fire Dept. will contact the HAZ MAT team. No employee is to enter the area for any reason once the area has been evacuated. The area is to be secured with red danger tape and access restricted. If necessary, all employees are to be evacuated from the facility and taken to an appropriate distance from the plant. Once the Emergency Spill Clean Up contractor arrives, they are to take control of the containment, control and clean up. Shaffer Industrial Services is the designated Emergency spill cleanup contractor.

12.10.2 During an emergency, the facility Emergency Coordinator shall take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, reoccur, or spread to other hazardous materials or waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

The following information is to be supplied to the Shaffer Industrial Services.:

1. The name and/or a description of the chemical or substance.
2. The chemical name and common name.
3. The chemical identification number.
4. Location of the spill.
5. Other chemicals in the area.
6. Approximation of the quantity spilled or released if possible.
7. Any additional information which may be helpful. Only after the Emergency Spill Cleanup contractor has declared the area safe, will employees be allowed to return to the plant.

12.10.3 When the incident is under control, the Emergency Coordinator will assure that a licensed hazardous material waste hauler provides for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility.

12.10.4 Due to the limited in-house emergency capabilities which are available at Warren Steel Holdings: the local Fire Dept. shall be called to assist whenever significant spill is encountered. Arrangements are to be made with a licensed hazardous material waste cleanup/hauler for all large spills. Copies of this Contingency Plan have been provided to the appropriate emergency authorities at the **Champion/Warren Township Fire Departments and the Warren Police Department**

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13. TORNADOS/SEVERE WEATHER

13.1 Tornados are always a possibility in Ohio during the spring and summer seasons. In the event of a tornado, all employees shall seek inside shelter in designated tornado shelters (**Refer to Appendix C for List of Designated Severe Weather Shelters**). If an employee is unable to reach a tornado shelter they shall go to:

- 13.1.1 Small interior rooms on the lowest floor and without windows.
- 13.1.2 Hallways on the lowest floor away from doors and windows.
- 13.1.3 Rooms constructed with reinforced concrete, brick, or block with no windows.
- 13.1.4 Stay away from outside walls and windows
- 13.1.5 If outside or unable to reach a tornado shelter, employee shall lie down in a ditch or on the floor or get under heavy equipment staying away from doors and window.

13.2 The Security department shall monitor the weather band radio and the weather radar on www.weather.com when severe weather exits. If it is determined that a tornado is in the area or the potential for a tornado exists:

13.2.1 Security will contact all Supervisors/Managers by designated radio channels and advise them we have a weather emergency and direct them to go to channel three. Further instruction will be on channel three.

13.2.2 Supervisors shall contact all employees and direct them to their designated tornado shelters. Employees shall be accounted for as outlined in the Emergency Action Plan.

13.3 Weather emergency priorities should include:

- 13.3.1 All crane operators are down from cranes.
- 13.3.2 All equipment is shut off
- 13.3.3 The EAF, LRF and the Caster are in a controlled state.
- 13.3.4 All employees are accounted for and report to the established shelter in each work area.

13.4 Only after the all clear has been given by Security, are employees to resume work. After the tornado has passed, all employees are to report to their departmental Supervisor immediately. If there are any injured employees, please follow the procedures outlined in the Medical Emergency section.

14. FUEL SPILL

14.1 In the event of a fuel spill, contact a supervisor immediately.

- 14.1.1 Clear area of people
- 14.1.2 Supervisor contacts the Emergency Coordinator or designee, EHS Manager and appropriate Management personnel.
- 14.1.3 The Emergency Coordinator or designee and the EHS Manager or designee shall evaluate the spill and determine if it can be contained and cleaned up in-house by properly trained personnel or does the spill have to be contained and cleaned up by the HAZ MAT team
- 14.1.4 Eliminate all ignition sources (i.e., cigarettes, sparks or flames)
- 14.1.5 The Emergency Coordinator, with help of Supervisors/Managers, shall secure the area and restrict access to the spill area by personnel.

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14.2 If the spill is determined to be a Non-Emergency spill, refer to section 12 and sub-section 12.8

14.3 If the spill is determined to be an Emergency spill, refer to section 12, and sub-section 12.10

15. WORKPLACE VIOLENCE

15.1 Violence in the workplace is an increasing concern. It takes the form of harassment, threats and attacks which cause physical or mental harm. Our company will ensure a safe and healthy work environment for all of our employees. Depending on your job function, there may be different exposures to consider. Violence from controllable, internal sources will not be tolerated for any reason.

15.2 This includes, but is not limited to the following:

- 15.2.1 Disruptive activity in the workplace.
- 15.2.2 Threatening, hostile or intimidating behavior.
- 15.2.3 Possession of a dangerous weapon.
- 15.2.4 Violation of restraining orders.
- 15.2.5 Fighting
- 15.2.6 Verbal Abuse
- 15.2.7 Stalking
- 15.2.8 Sabotaging another employees work.
- 15.2.9 Harmful misuse of equipment or other company property.
- 15.2.10 Any behavior which is perceived as threatening by the recipient.
- 15.2.11 Insubordination
- 15.2.12 Sabotaging company equipment or property.

15.3 In an effort to protect our employees WSH will:

- 15.3.1 Screen applicants thoroughly.
- 15.3.2 Maintain an open line of communication between salary and hourly employees to keep all parties informed.
- 15.3.3 Employees shall be trained on conflict resolution
- 15.3.4 Consider security when dealing with adverse issues (i.e., layoffs, terminations, etc.).
- 15.3.5 Respond immediately to threatening situations and attempt to resolve the conflict before it escalates to violence.
- 15.3.6 Observe and document personality changes, negative attitudes, and other danger signals.
- 15.3.7 Provide counseling and training to employees in order to minimize conflict.
- 15.3.8 Mandate disciplinary actions for acts of violence.
- 15.3.9 In cases of threatening behavior, Supervisors are to request assistance from other Supervisors immediately.
- 15.3.10 The Supervisor is never to attempt to confront an employee in a manner that would elevate the situation.
- 15.3.11 The problem employees will be removed from the area immediately.
- 15.3.12 If necessary the Police are to be for assistance and the problem employee(s) shall be isolated from other employees until the police arrive. If more than one employee is involved in the conflict, the employees shall be separated in different rooms or areas.

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15.3.13 Personal safety of our employees is of primary concern. Should you feel that there is a potential for violence, from whatever source, you are expected to report it to your Supervisor so that appropriate actions may be taken. The safety of you and your co-workers may be at stake.

16. BOMB THREAT

- 16.1 In the event that Security receives a Bomb Threat, the following procedure shall be followed:
 - 16.1.1 Security is to keep the caller on the line as long as possible and is to record every spoken word by the person, if possible.
 - 16.1.2 If the caller does not indicate the location of the bomb or the time of possible detonation, the caller should be asked this information.
 - 16.1.3 Inform the caller that the building is occupied and the detonation of a bomb could result death or serious injury too many innocent people.
 - 16.1.4 Pay special attention to background noises, such as motor (s) running, background music and any other noises which may give a clue as to where the call is being made from.
 - 16.1.5 Listen closely to the voice (male, female), voice quality (calm, excited), accents, speech impediments. Immediately after the caller hangs up, by radio, announce on each channel that there is an emergency in the plant and go to channel (3) for further instructions.
 - 16.1.6 The Emergency Action Plan shall be activated and employees shall report to their designated emergency assembly areas. The immediate Supervisor shall conduct a head count of all of their employees.
 - 16.1.7 Security shall dial "911" and notify the police that there has been a bomb threat and provide the dispatcher with requested information.
 - 16.1.8 All employees shall not enter any building until emergency services have deemed it safe to enter.

17. LADLE/FURNACE/TUNDISH BREAKOUT

- 17.1 The risk of a ladle/furnace breakout will always be present in steel making. In the event of a ladle/furnace breakout, proceed with the following procedures;
- 17.2 **Caster ladle breakout**
 - 17.2.1 Once a breakout has been discovered, immediately notify your Supervisor. Rotate the ladle turret to the emergency dump ladle and fully open the ladle. Ensure employees are clear before rotating turret.
 - 17.2.2 If molten steel damages the molds, **refer to section 18, subsection 18.3 for radiation detection at the Caster.**
 - 17.2.3 The Supervisor shall then do the following:
 - 17.2.4 Account for all affected employees and check for injuries
 - 17.2.5 If any employees have been injured, follow reporting procedures outlined in **SECTION 6.**
 - 17.2.6 Determine if any property has caught fire and if so, decide if the fire can be contained by the use of a fire extinguisher or does the fire dept. need to be notified. If the fire dept. needs to be contacted, refer to the procedure outlined in **SECTION 5** and the Emergency Action Plan shall be activated.
- 17.3 **Tundish Breakout (Burn Through)**
 - 17.3.1 When a hot spot or steel is observed coming from the Tundish anywhere but out of one of

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- SEN'S, the cast floor personnel shall be notified by announcing "Tundish hot spot or burn through at location _____".
- 17.3.2 The strand operator or caster leader verifies hot spot location.
 - 17.3.3 Caster Supervisor - As soon as a Tundish breakout is discovered, direct Maintenance to shut off the gas and oxygen lines.
 - 17.3.4 If a hot spot or burn through occurs at any location on the Tundish, shut off the ladle using the ladle slidegate pendant and raise the ladle by pressing the "UP" button on the ladle operator's control station. After raising the ladle, immediately leave the ladleman's platform.
 - 17.3.5 If possible, remove the shroud.
 - 17.3.6 Strand Operator-Close stopper rods and announce "Off on Strands #'s _____ and ready to move Tundish car on Strand #'s _____".
 - 17.3.7 Strand Operators-Do not fire the Emergency Gates unless you have uncontrolled steel flow through the SEN. If there is time, raise the Tundish and move the emergency boxes. If there is a Tundish burn through, hit the "Emergency Run" on the Tundish Car Panel to the Tundish to the emergency boxes.
 - 17.3.8 Strand Operators (all)- Once the Tundish is over the Emergency Boxes, open the stopper rods (if possible) using the remote hand held control boxes and drain the Tundish.
 - 17.3.9 Caster Personnel- Obtain fire hoses and hose down equipment that is burning and any steel on the floor.
 - 17.3.10 Strand Operators- If the emergency gates were used to stop the flow from Tundish to mold, fish out the SEN's from the mold. Water down bloom in mold until black. Refer to "Cold bloom removal".
 - 17.3.11 If molten steel runs over and down in the molds, secure the area and contact the R.S.O and or designee. See section 18.3 (Radiation detected at the Caster)
 - 17.3.11 Caster Supervisor- If the Fire Dept. is needed. Refer to Section 5 for reporting procedures.
 - 17.3.12 Caster personnel shall report to their designated emergency assembly area to be accounted for.

**FOR ALL OTHER EMERGENCY SITUATIONS AT THE CASTER, REFER TO THE
EMERGENCY PROCEDURES BINDER IN THE CASTER TURRET PULPIT**

17.4 LRF ladle breakout

- 17.4.1 Once a breakout has been discovered, contact your Supervisor immediately.
- 17.4.2 The Supervisor determines the safest way to transport the ladle to the emergency ladle dump pit without jeopardizing the safety of employees, property and equipment.
- 17.4.3 The Supervisor shall then do the following:
 - 17.4.4 Account for all affected employees and check for injuries
 - 17.4.5 If any employees have been injured, follow reporting procedures as outlined in **SECTION 6**.
 - 17.4.6 Determine if any property has caught fire and if so, decide if the fire can be contained by the use of a fire extinguisher or does the fire dept. need to be notified. If the fire dept. needs to be contacted, refer to the procedure outlined in **SECTION 5** and the Emergency Action Plan shall be activated.

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17.5 EAF ladle breakout

- 17.5.1 When a breakout has been discovered, immediately contact your Supervisor.
- 17.5.2 The Supervisor is to immediately coordinate the transport of the ladle to the emergency ladle dump pit in the safest possible manner without jeopardizing the safety of employees, property and equipment.
- 17.5.3 The Supervisor shall then do the following:
- 17.5.4 Account for all affected employees and check for injuries
- 17.5.5 If any employees have been injured, follow reporting procedures as outlined in **SECTION 6**.
- 17.5.6 Determine if any property has caught fire and if so, decide if the fire can be contained by the use of a fire extinguisher or does the fire dept. need to be notified. If the fire dept. needs to be contacted, refer to the procedure outlined in **SECTION 5** and the Emergency Action Plan shall be activated.

17.6 EAF Furnace Breakout

- 17.6.1 When a breakout has been discovered, immediately contact your Supervisor.
- 17.6.2 The Supervisor is to contact the EAF operator and instruct to tilt the furnace to the slag side and dump the ladle into the pit below. The Supervisor will first ensure that all employees and equipment are clear below before dumping the ladle.
- 17.6.3 The Supervisor shall then do the following:
- 17.6.4 Account for all affected employees and check for injuries
- 17.6.5 If any employees have been injured, follow reporting procedures as outlined in **SECTION 6**.
- 17.6.6 Determine if any property has caught fire and if so, decide if the fire can be contained by the use of a fire extinguisher or does the fire dept. need to be notified. If the fire dept. needs to be contacted, refer to the procedure outlined in **SECTION 5** and the Emergency Action Plan shall be activated.

18. RADIATION DETECTION

18.1 In-coming scrap radiation alarm

- 18.1.1 When radiation is detected at the scale, the following procedures shall be followed:
- 18.1.2 Notify the truck driver that the load being shipped has set off the radiation detector.
- 18.1.3 Inform the truck driver to pull completely off the scale and re-drive the truck across the scale.
- 18.1.4 If the detector does not alarm upon the second pass through the scale, instruct the truck driver to make a third pass across the scale. If the radiation alarm does not sound, the truck may enter the facility.
- 18.1.5 If the detector alarms for radiation a second time, the truck driver shall be instructed to pull off the scale and relocate the truck to the South-Eastern portion of the lot and the driver shall wait in the Security Office until notified by WSH officials.
- 18.1.6 The truck shall be quarantined and secured at the South Eastern portion of the lot until radiation levels have been determined by WSH R.S.O.
- 18.1.7 The scale attendant shall notify Security (x7085) of the incident and the Radiation Safety Officer (R.S.O) shall be notified by Security.
- 18.1.8 The R.S.O will determine, with the use of a survey meter, what levels of radiation are present.
- 18.1.9 The area shall be secured, with RED DANGER TAPE, at a safe distance determined by the R.S.O

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and no personnel shall be permitted to enter that area until it has been deemed safe.

18.1.9.1 If the radiation levels are deemed unsafe the R.S.O shall contact the common carrier.

18.1.9.2 The R.S.O shall then notify the Ohio Dept. of Health's Bureau of Radiation (614) 722-7221

18.2 Radiation detection in the Chemlab

18.2.1 If radiation is detected in the Chemlab, the following procedure shall be followed:

18.2.2 Personnel inside the Chemlab shall exit the area.

18.2.3 The Chemlab employee(s) shall contact the Melting Manager advising that the survey meter has detected radiation in the samples.

18.2.4 The Melting Manager or designee shall contact Security and inform them of the situation.

18.2.5 Power to the EAF, LRF, VTD and the Bag House shall be shut down.

18.2.6 Personnel shall report to their Depts. assigned assembly area to be counted.

18.2.7 Security shall contact **(R.S.O, Melt Shop Manager, Quality Manager, C.O.O)**

18.2.8 The R.S.O shall record the levels of radiation in the plant and contact the Ohio Health Dept. Bureau of Radiation at (614) 722-7221

18.2.9 No personnel are permitted into the Melt Shop without the approval of the R.S.O

18.3 Radiation detected at the Caster

18.3.1 In the event that Radiation is detected at the Caster, the following procedure shall be followed:

18.3.2 The Supervisor/Manager shall evacuate personnel from the area immediately and notify security.

18.3.3 The area shall be cordoned off to restrict access 20 ft. away from the area with Red Danger tape.

18.3.4 Security shall notify the **(R.S.O, Caster Manager, Melt Shop Manager, C.O.O)**

18.3.5 The R.S.O shall obtain a reading of the levels of radiation with the use of the survey meter (Geiger Counter)

18.3.6 If the radiation levels are found to be unsafe, the R.S.O shall contact the Ohio Health Dept. Bureau of Radiation (614) 722-7221

18.3.7 No personnel shall enter the Caster area without approval of the R.S.O

19. TRAINING

19.1 In an effort to ensure that the Emergency Action Plan is working properly, emergency evacuation/take shelter drills shall be conducted at least annually. The drill shall be unannounced to the employees. Once the warning has been given all employees shall take the appropriate exit route, take shelter and report to their designated area assigned. The drill is to be monitored and timed. Any problems in the drill are to be documented and corrective action taken immediately.

19.2 All new employees shall be instructed in the Emergency Action Plan during initial employment training and during Department Specific Safety Training. The trainer/supervisor is to go over the various types of emergencies and the appropriate reporting procedures. Also the employee is to be taken through a walk through drill so he/she is aware of the appropriate exit route, where to take shelter and their assigned assembly area.

19.3 Current employees shall be instructed in the Emergency Action plan every six months or when a change in this policy occurs.

19.4 Proper use of fire extinguishers/fire safety shall be trained at least annually to all employees or more

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if needed.

APPENDIX A

Emergency Contact List

The following is a list of emergency contacts for Warren Steel Holdings LLC

| Name | Title | Office Phone | Cell Phone |
|------------------|---------------------------------------|---------------------|-----------------------|
| Security | Channel "3" on the radio | 330-847-7085 | Non-responsive |
| Mark Trapp | Chief Operating Officer | 330-847-6107 | |
| Marshall Green | Melting Manager | | |
| Jon Schuster | Raw Materials/Scrap Manager | | |
| Safety Dept. | EHS Manager/ Radiation Safety Officer | 330-847-6119 | |
| Dave Wanstreet | Millwright Manager | | |
| Ed Johnson | Elect/Auto Manager | | |
| Bryan Rhoads | Plant Engineer | 330-847-6127 | |
| Nancy Waselich | IT Manager | | |
| James Whitehead | Maintenance Division Manager | | |
| Ed Vasko | Maintenance Engineer | | |
| Eddie Overdorf | Refractory Manager | | |
| Mike Villanueva | Casting Manager | | |
| Terry Krebs | Utility, Scrap Coordinator | | |
| Denise Carissimo | HR Manager | | |
| Dave Moore | Quality Manager | | |
| Chris Lait | Shipping/Logistics Manager | | |
| Chuck Stout | Stein Site Manager | | |
| Thad Smith | SMS Operations Manager | | |

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APPENDIX B

The following is a list of Emergency Response Agencies for Warren Steel Holdings LLC.

| <i>Emergency Response Agencies</i> | <i>Contact Number</i> |
|--|------------------------------|
| Shaffer Industrial Services (Emergency Spill Cleanup) | 330-847-2922 |
| Ohio EPA Emergency Response | 800-282-9378 |
| Warren Township Fire Department (Emergency) | 911 |
| Warren Township Fire Department (Non-Emergency) | 330-898-2041 |
| Champion Township Fire Department (Emergency) | 911 |
| Champion Township Fire Dept. (Non-Emergency) | 330-847-0311 |
| City of Warren Water Dept. Environmental Services | 330-841-2561 |
| Warren Police Dept. | 911 |
| Ambulance | 911 |
| Ohio Health Dept. Radiation Protection 24 Hour hotline | (614) 722-7221 |

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APPENDIX C

Designated Severe Weather Shelter Locations. (Note attached pictures of shelters)

| Department/Area | Location |
|------------------------|--|
| EAF | LRF Hydraulic room in the Melt Shop |
| Caster | Maintenance utility room 1 st floor under caster turret floor |
| LRF | LRF Hydraulic room in the Melt Shop |
| Refractory | Maintenance utility room 1 st floor under caster turret floor |
| Maintenance | Closest shelter to work area |
| Engineering Building | Engineering Building, Interior offices and hallways |
| Security | Old Receiving building |
| Baghouse | Craft Shop, Millwrights breakroom |
| QA (Chem Lab) | LRF Hydraulic room in the Melt Shop |
| U.S. Filters Building | U.S. Filter building office |
| Scale House | Old Receiving building |
| Waste Water Building | River Pump House Basement |
| Franklin Yard | River Pump House Basement |
| Chem Lab (Etch Lab) | Engineering Building, Interior offices and hallways |

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APPENDIX D

Designated Emergency Evacuation Assembly Areas. (Note attached map)

| | |
|----------------------------|-------------------------------|
| Caster | North of the Steam Generators |
| Quality (Chemlab) | North of the Steam Generators |
| Quality (Etch Lab) | Front of Engineering Building |
| Refractory | Outside Refractory Shed |
| LRF | Outside Maintenance Trailer |
| EAF | Outside Maintenance Trailer |
| Maintenance | Outside Maintenance Trailer |
| Scale Personnel | Front of Security Building |
| Security | Front of Security Building |
| Engineering/Administration | Front of Engineering Building |
| Bag House | Outside Maintenance Trailer |
| Franklin Yard (Security) | Front of Security Building |
| Waste Water Personnel | North of the Steam Generators |
| U.S. Filter Personnel | North of the Steam Generators |

***Note: If the assigned assembly area is unsafe to occupy due to the nature of the incident, report to an alternate location that is known by all employees.**

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APPENDIX F
EMERGENCY ASSEMBLY AREAS MAPS

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APPENDIX G
SEVERE WEATHER SHELTER LOCATIONS (PICTURES)

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APPENDIX H
EMERGENCY EVACUATION MAPS

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APPROVED BY:

Mark Trapp, Chief Operating Officer

Date

Jon Schuster, Manager, Steel Making Division

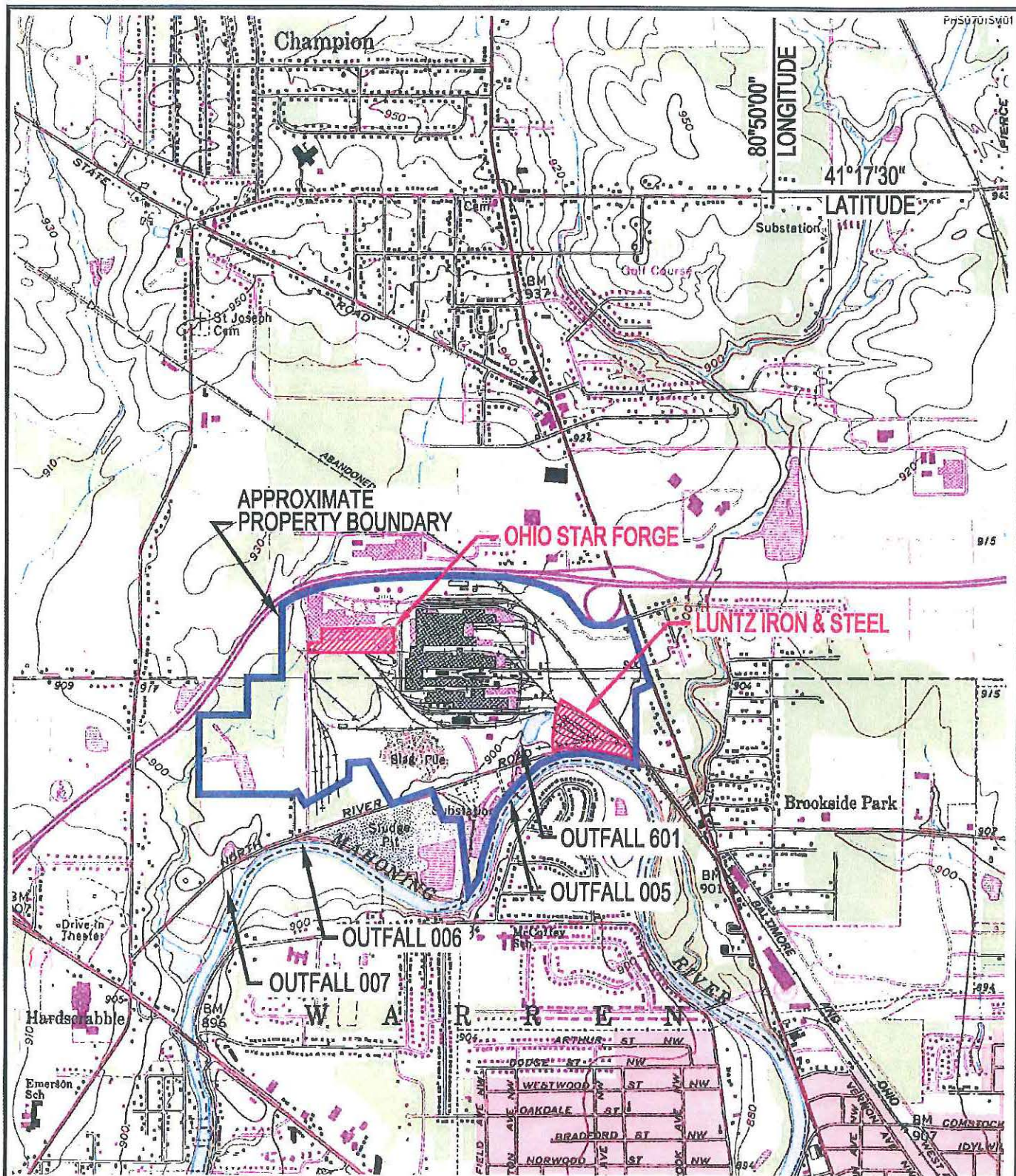
Date

Chris Green, EHS Manager/R.S.O

Date

| <i>Revision #</i> | <i>Revision Date</i> | <i>Nature of Change</i> |
|-------------------|----------------------|-------------------------------|
| 001 | 8/1/2011 | Emergency Action Plan enacted |
| | | |
| | | |

JI-WS-02



North

0 1000 2000 4000

SCALE IN FEET

HORIZON ENVIRONMENTAL

Warren Steel Holdings, LLC
OEPA Permit No. 31D00050*JD

**SITE LOCATION
MAP**

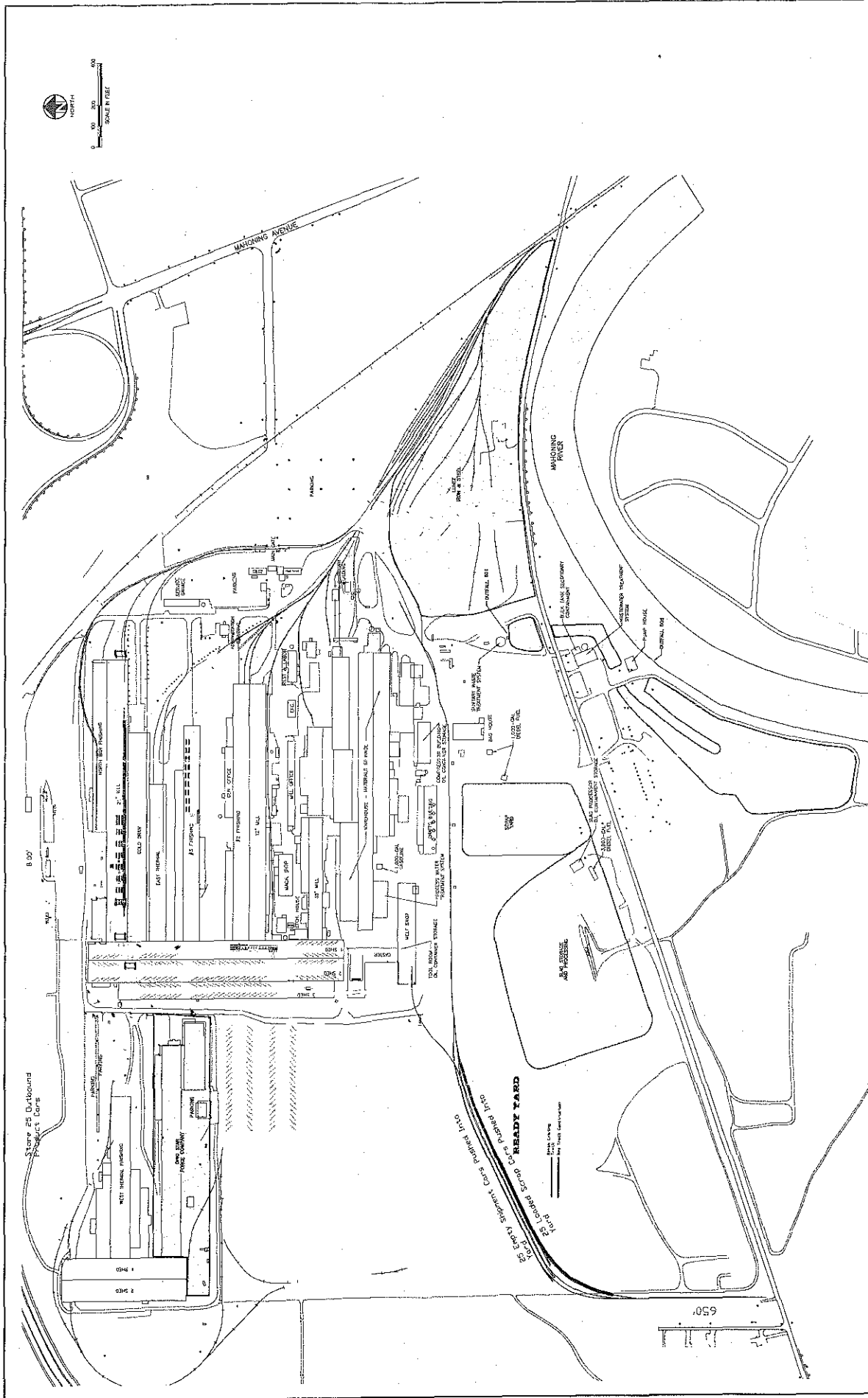
PROJECT NUMBER:
PHS-0701

FIGURE:

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AUGUST 2011

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|--|--|--|--|--|--|--|--|-----------------|
| WARREN STEEL HOLDINGS, LLC OSHA PERMIT No. 30000050-1D | | REVISIONS NO. _____ DATE _____ | | DESIGNED BY: _____ DRAWN BY: JCA CHECKED BY: _____ | DATE: _____ DATE: 08/11/2011 DATE: _____ | CAD FILE: PHS-0701 LAST EDIT: 08/11/2011 PLOT SCALE: 1" = 200' | PROJECT NUMBER: PHS-0701 SCALE: 1" = 200' | SHEET NUMBER: 2 |
|--|--|--|--|--|--|--|--|-----------------|

Horizon Environmental
 4771 50th STREET SE, SUITE ONE - GRAND RAPIDS, MI 49512
 616 554.3211 - FAX 616 554.3211 - www.horizonenv.com

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

| | | | | | | | |
|--|---|--|----------------|--|---|------------------------------------|----------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH000007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011715434 JJK | | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: (330) 847-6119 | | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | | (216) 642-1311 | | U.S. EPA ID Number OH0017730540 | |
| 7. Transporter 2 Company Name | | | | | | U.S. EPA ID Number | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | | U.S. EPA ID Number MID000724831 | |
| Facility's Phone: (800) 592-5488 | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | | No. | Type | | | |
| | 1. | RG, NA3077, HAZARDOUS WASTE, SOLID, N.O.S., 9, PGIII (EAF DUST K061), EPC 171 | 201 | CR | 11 | T | K061 |
| | 2. | | | | | | |
| | 3. | | | | | | |
| | 4. | | | | | | |
| 14. Special Handling Instructions and Additional Information | | | | | | | |
| <p style="text-align: center;">Box # 5003040</p> <p>15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.</p> | | | | | | | |
| Generator's/Offeror's Printed/Typed Name Jeff Ruckelshaus | | | | Signature | | Month Day Year 08 23 13 | |
| INT'L | 16. International Shipments: <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.: | | | | | | |
| | Transporter signature (for exports only): | | | | | | |
| TRANSPORTER | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| | Transporter 1 Printed/Typed Name Ed Ruckelshaus | | | | Signature | | Month Day Year 08 23 13 |
| | Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | |
| | Manifest Reference Number: | | | | | | |
| | 18b. Alternate Facility (or Generator) | | | | U.S. EPA ID Number | | |
| | Facility's Phone: | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | Month Day Year | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| | 1. | 2. | 3. | 4. | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | |
| Printed/Typed Name David Tarnacki | | | | Signature | | Month Day Year 08 20 13 | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

| | | | | | | | | | | | |
|---|---|---|----|--------------------------|--|--|---------------------------------|--|-----------------------------------|-----------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number <i>OH000007773</i> | | 2. Page 1 of <i>1</i> | | 3. Emergency Response Phone <i>(800) 535-5053</i> | | 4. Manifest Tracking Number <i>011715442 JJK</i> | | | |
| | | 5. Generator's Name and Mailing Address <i>WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE. WARREN, OH 44081</i> | | | | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: <i>(330) 847-6119</i> | | 6. Transporter 1 Company Name <i>ENVIROSERVE, J.V.</i> | | | | <i>(216) 642-1311</i> | | U.S. EPA ID Number <i>OH0017730540</i> | | | |
| 7. Transporter 2 Company Name | | | | | | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address <i>MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE MI 48111</i> | | | | | | | | U.S. EPA ID Number <i>MID000724831</i> | | | |
| Facility's Phone: <i>(800) 592-5439</i> | | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
| | | | | | | No. Type | | | | | |
| | 1. | <i>PG. NA3077, HAZARDOUS WASTE, SOLID, N.O.S., S. PGIII (EAF DUST K061), ERG 171</i> | | | | <i>001 CM</i> | | <i>15.61</i> | <i>T</i> | <i>K061</i> | |
| | 2. | | | | | | | | | | |
| | 3. | | | | | | | | | | |
| | 4. | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information <i>Box # WSH 30471 SERVICE RECEIPT # 190514</i> | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name <i>X James Henderson</i> | | | | | | Signature <i>[Signature]</i> | | Month Day Year <i>8 21 13</i> | | | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name <i>JOSEPH M RINK</i> | | | | | | Signature <i>[Signature]</i> | | Month Day Year <i>08 21 13</i> | | |
| | Transporter 2 Printed/Typed Name | | | | | | Signature | | Month Day Year | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | |
| | Manifest Reference Number: | | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | | |
| | Facility's Phone: | | | | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | | | | Month Day Year | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | |
| 1. <i>4110</i> | | | 2. | | | 3. | | | 4. | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a | | | | | | | | | | | |
| Printed/Typed Name <i>David Tarnacki</i> | | | | | | Signature <i>[Signature]</i> | | Month Day Year <i>8 26 13</i> | | | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

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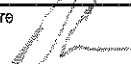

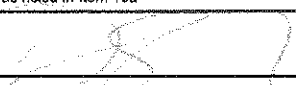
| | | | | | | | | | | | | |
|---|---|--|----|----------------|----|--|---------------------------------|--|------------------------|--------------------------|--------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH-000007773 | | 2. Page 1 of 1 | | 3. Emergency Response Phone (800) 535-5053 | | 4. Manifest Tracking Number 011715441 JJK | | | | |
| | | 5. Generator's Name and Mailing Address WARREN STEEL BUILDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | | | | Generator's Site Address (if different than mailing address) | | | | |
| | | Generator's Phone: (330) 847-6119 | | | | | | | | | | |
| | | 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | | | | U.S. EPA ID Number OH-00017730540 | | | | |
| | | 7. Transporter 2 Company Name | | | | | | U.S. EPA ID Number | | | | |
| | | 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | | U.S. EPA ID Number MI0000724831 | | | | |
| | | Facility's Phone: (800) 592-5489 | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | |
| | | | | | | No. | Type | | | | | |
| | 1. | RQ. NA3077, HAZARDOUS WASTE, SOLID, N.O.S., 5, PCM (EAF DUST K061), ERG 171 | | | | | CA | 16 | T | K061 | | |
| | 2. | | | | | | | | | | | |
| | 3. | | | | | | | | | | | |
| | 4. | | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information Bot # W-43097 | | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Dustin MORRIS | | | | | | Signature <i>[Signature]</i> | | Month 8 | | Day Year 27 13 | | |
| INTL | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Ed Sychola | | | | | | Signature <i>[Signature]</i> | | Month 08 | | Day Year 27 13 | |
| | Transporter 2 Printed/Typed Name | | | | | | Signature | | Month | | Day Year | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | | |
| | Manifest Reference Number: _____ | | | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) | | | | | | U.S. EPA ID Number | | | | | |
| | Facility's Phone: _____ | | | | | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | | | | Month Day Year ____ | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | | |
| | 1. 1110 | | 2. | | 3. | | 4. | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a. | | | | | | | | | | | | |
| | Printed/Typed Name [Signature] | | | | | | Signature <i>[Signature]</i> | | Month 8 | | Day Year 27 13 | |

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| | | | | | | | | | | |
|---|---|--|----|----------------|---------------------------------|--|-----------------------------------|--|-------------------------------|--------------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OHED0007773 | | 2. Page 1 of 1 | | 3. Emergency Response Phone (800) 535-5053 | | 4. Manifest Tracking Number 011719226 JJK | | |
| | | 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | | | | Generator's Site Address (if different than mailing address) | | |
| Generator's Phone: (330) 847-8119 | | 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | | U.S. EPA ID Number OHED017730540 | | | | |
| | | 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address INDUSTRIAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | U.S. EPA ID Number MID000724531 | | | | Facility's Phone: (800) 582-5489 | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) 1. FLUORANTHRAcene, HAZARDOUS WASTE, SOLID, H.U.S. 5. FOR LEAK DUST K061, EPC 171 | | | | 10. Containers No. 001 Type CM | | 11. Total Quantity 14 | 12. Unit Wt./Vol. T | 13. Waste Codes K061 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information box # SEV3041 | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name John P. Jones | | | | | | Signature <i>[Signature]</i> | | Month Day Year 5 20 13 | | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Kenneth Loring | | | | Signature <i>[Signature]</i> | | Month Day Year 08 26 13 | | | |
| | Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year | | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | |
| | Manifest Reference Number: | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | |
| | Facility's Phone: | | | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | | | Month Day Year | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | |
| | 1. H110 | | 2. | | 3. | | 4. | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a | | | | | | | | | | |
| Printed/Typed Name Charles Swope | | | | | | Signature <i>[Signature]</i> | | Month Day Year 08 27 13 | | |

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Form Approved. OMB No. 2050-0039

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|---|---|--|---|---|---|-----------------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH1000007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011715440 JJK | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: (330) 847-6119 | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | U.S. EPA ID Number (216) 642-1311 OH10017730540 | | | |
| 7. Transporter 2 Company Name | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | U.S. EPA ID Number (800) 593-5489 MICH00724831 | | | |
| Facility's Phone: | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. Type | | 11. Total Quantity | 12. Unit Wt./Vol. |
| | 1. | HD, HAZARDOUS WASTE, SOLID, N.O.S., 9 PCN (EAF DUST K061), EFG 171 | 16 CM | | 16 | T |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |
| 13. Waste Codes K061 | | | | | | |
| 14. Special Handling Instructions and Additional Information Box # WSH 3092 | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | |
| Generator's/Officer's Printed/Typed Name Dustin Morris | | | Signature  | | Month Day Year 8 26 13 | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Ed Spuchala | | | Signature  | | Month Day Year 08 26 13 |
| | Transporter 2 Printed/Typed Name | | | Signature | | Month Day Year |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | |
| | Manifest Reference Number: | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | |
| | Facility's Phone: | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | | | Month Day Year | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| 1. H110 | | 2. | | 3. | | 4. |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| Printed/Typed Name Dan S. [Signature] | | | Signature  | | Month Day Year 8 26 13 | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

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|---|---|--|--|----------------|-----------|--|----------------|---|-------------------|-----------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OHF000007772 | | 2. Page 1 of 1 | | 3. Emergency Response Phone (800) 535-5053 | | 4. Manifest Tracking Number 011715438 JJK | | |
| | | 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MANIONING AVE. WARREN, OH 44483 | | | | | | | | |
| Generator's Site Address (if different than mailing address) | | | | | | | | | | |
| Generator's Phone: (330) 847-8119 | | | | | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | | | | U.S. EPA ID Number OHID017730540 | | | | |
| 7. Transporter 2 Company Name | | | | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address MILWAUKEE DISPOSAL WASTE TREATMENT PLANT 48350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | | U.S. EPA ID Number MI0000724831 | | | | |
| Facility's Phone: (800) 582-5488 | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers No. Type | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | 1. | PG. HA3077, HAZARDOUS WASTE, SOLID, N.O.S., 9. PG01 (EAF OLEF K061), ERG 171 | | | | 201 CM | | 13 | T | K061 |
| | 2. | | | | | | | | | |
| | 3. | | | | | | | | | |
| | 4. | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information BA# WSH 3043 | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Dustin MORRIS | | | | | | Signature <i>[Signature]</i> | | Month Day Year 8 28 13 | | |
| TRANSPORTER | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | |
| | Transporter 1 Printed/Typed Name Ed Spachala | | | | | Signature <i>[Signature]</i> | | Month Day Year 08 28 13 | | |
| Transporter 2 Printed/Typed Name | | | | | Signature | | Month Day Year | | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | |
| | Facility's Phone: _____ | | | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | | | | Month Day Year | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | |
| 1. H110 | | 2. | | 3. | | 4. | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | |
| Printed/Typed Name Don St. Key | | | | | | Signature <i>[Signature]</i> | | Month Day Year 8 28 13 | | |

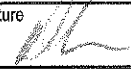
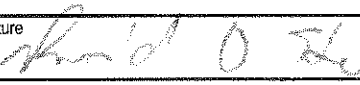
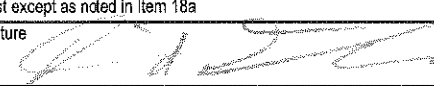
Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

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|---|---|--|----------------|--|---|---------------------------|----------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH00007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 555-5063 | 4. Manifest Tracking Number 011715443 JJK | | | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 WANDERING AVE WARREN, OH 44483 | | | | Generator's Site Address (if different than mailing address) | | | | |
| Generator's Phone: (330) 847-6119 | | | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, I.V. | | | | U.S. EPA ID Number (216) 642-1311 OH00017730540 | | | | |
| 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | U.S. EPA ID Number MID000724831 | | | | |
| Facility's Phone: (800) 562-5489 | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
| | | | No. | Type | | | | |
| | | 1. RQ. HAZARDOUS WASTE, SOLID, N.O.S., 8 PGM (EAF DUST K061), ERG 171 | 001 | CM | 14 | T | K061 | |
| | | 2. | | | | | | |
| | | 3. | | | | | | |
| | | 4. | | | | | | |
| 14. Special Handling Instructions and Additional Information box # WSH3044 | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | |
| Generator's/Officer's Printed/Typed Name John Rodgers | | | | Signature <i>John Rodgers</i> | | Month Day Year 8 29 13 | | |
| TRANSPORTER | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | |
| | Transporter 1 Printed/Typed Name Kenneth Loring | | | | Signature <i>Kenneth Loring</i> | | Month Day Year 08 29 13 | |
| | Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | |
| | Manifest Reference Number: | | | | | | | |
| | 18b. Alternate Facility (or Generator) | | | | U.S. EPA ID Number | | | |
| | Facility's Phone: | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | Month Day Year | | | |
| | 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| | 1. h110 | 2. | 3. | 4. | | | | |
| | 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a | | | | | | | |
| | Printed/Typed Name Dan S. Loring | | | | Signature <i>Dan S. Loring</i> | | Month Day Year 8 30 13 | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

| | | | | | | | |
|--|---|--|-------------------|--|---|-------------------------------------|--------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH1000007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011716451 JJK | | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE. WARREN, OH 44183 | | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: (330) 847-6119 | | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | | (216) 542-1311 | | U.S. EPA ID Number OH10017730540 | |
| 7. Transporter 2 Company Name | | | | | | U.S. EPA ID Number | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. L-84 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | | U.S. EPA ID Number | |
| Facility's Phone: (800) 582-5488 | | | | | | MICH100724831 | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | | No. | Type | | | |
| | X | 1. PG. NA3077, HAZARDOUS WASTE, SOLID, N.O.S., 5 PGB (EAF DUST K061), ERG 171 APPL# 10005MD1 | 001 | CM | 16 | T | K061 |
| | | 2. | | | | | |
| | | 3. | | | | | |
| | | 4. | | | | | |
| 14. Special Handling Instructions and Additional Information WSH 3013 | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generator's/Offeror's Printed/Typed Name Dustin Morris | | | | Signature  | | Month Day Year 8 31 13 | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | |
| | Transporter signature (for exports only): _____ | | | | | | |
| TRANSPORTER | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| | Transporter 1 Printed/Typed Name Ken Boie | | | | Signature  | | Month Day Year |
| | Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | |
| | Manifest Reference Number: _____ | | | | | | |
| | 18b. Alternate Facility (or Generator) | | | | U.S. EPA ID Number | | |
| | Facility's Phone: _____ | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | Month Day Year | | |
| | 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| | 1. A110 | 2. | 3. | 4. | | | |
| | 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| | Printed/Typed Name David Tarnacki | | | | Signature  | | Month Day Year 9 3 13 |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

| | | | | | | | | | | | | | | |
|---|---|--|----|----------------|----|--|-----------|--|-------------------|--|---------------------------------|--------------------|------------------|-------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH000007773 | | 2. Page 1 of 1 | | 3. Emergency Response Phone (800) 535-5163 | | 4. Manifest Tracking Number 011715437 JJK | | | | | | |
| | | 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MANONING AVE, WARREN, OH 44483 | | | | | | Generator's Site Address (if different than mailing address) | | | | | | |
| | | Generator's Phone: (330) 847-6119 | | | | | | | | | | | | |
| | | 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | | | | (216) 642-1311 | | U.S. EPA ID Number OH0017730540 | | | | |
| | | 7. Transporter 2 Company Name | | | | | | | | U.S. EPA ID Number | | | | |
| | | 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 48350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | | | | U.S. EPA ID Number MID0000724831 | | | | |
| | | Facility's Phone: (800) 592-5489 | | | | | | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | | | |
| | | | | | | No. | Type | | | | | | | |
| | | 1. PG. NA3077, HAZARDOUS WASTE, SOLID N.O.S., 3, PGH (EAF DUST K061), ERG 171 | | | | 001 | ca | 15 | T | K061 | | | | |
| | | 2. | | | | | | | | | | | | |
| | | 3. | | | | | | | | | | | | |
| | | 4. | | | | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information box # WSH3042 | | | | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name Jeff Applquist | | | | | | | | | | Signature <i>[Signature]</i> | | Month 8 | Day 30 | Year 13 |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____ | | | | | | | | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Kenneth Loring | | | | | | | | | | Signature <i>[Signature]</i> | Month 08 | Day 30 | Year 13 |
| | Transporter 2 Printed/Typed Name | | | | | | | | | | Signature | Month | Day | Year |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | | | | |
| | Manifest Reference Number: _____ | | | | | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | | | | | |
| | Facility's Phone: _____ | | | | | | | | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) _____ Month _____ Day _____ Year _____ | | | | | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | | | | |
| | 1. WU | | 2. | | 3. | | 4. | | | | | | | |
| 20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | | | | | | |
| | Printed/Typed Name David Tormandi | | | | | | | | | | Signature <i>[Signature]</i> | Month 8 | Day 30 | Year 13 |

| | | | | | | | | | | | |
|---|---|---|--|----------------|---------------------------------|--|-------|--|-------------------|-----------------|------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number <i>CHRM0007773</i> | | 2. Page 1 of 1 | | 3. Emergency Response Phone <i>(800) 535-5053</i> | | 4. Manifest Tracking Number 011716450 JJK | | | |
| | | 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | | | | Generator's Site Address (if different than mailing address) | | | |
| 6. Transporter 1 Company Name <i>ENVIRONMENTAL</i> | | Generator's Phone: <i>(216) 447-0113</i> | | | | | | U.S. EPA ID Number <i>OH0017730540</i> | | | |
| 7. Transporter 2 Company Name | | U.S. EPA ID Number | | | | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. L-04 SERVICE DRIVE, BELLEVILLE, MI 48111 | | Facility's Phone: <i>(800) 503-5480</i> | | | | | | U.S. EPA ID Number <i>MI000034831</i> | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | |
| | | | | | | No. | Type | | | | |
| | X | 1. RD NA3077, HAZARDOUS WASTE, SOLID H.O.S. 5 FOR LEAK DUST K061, ERG 171 | | | | 001 | DR | 14 | | K061 | |
| | | 2. <i>APPEL # TRANSFER</i> | | | | | | | | | |
| | | 3. | | | | | | | | | |
| | | 4. | | | | | | | | | |
| 14. Special Handling Instructions and Additional Information box #SEV3041 | | | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | | | |
| Generator's/Offor's Printed/Typed Name <i>Gene Ward</i> | | | | | Signature <i>[Signature]</i> | | Month | | Day | Year | |
| | | | | | | | 9 | | 1 | 13 | |
| INTL | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | | |
| | Transporter signature (for exports only): _____ | | | | | | | | | | |
| TRANSPORTER | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | | |
| | Transporter 1 Printed/Typed Name <i>Kenneth Loring</i> | | | | | Signature <i>[Signature]</i> | | Month | | Day | Year |
| | | | | | | | 09 | | 01 | 13 | |
| Transporter 2 Printed/Typed Name | | | | | Signature | | Month | | Day | Year | |
| | | | | | | | | | | | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | | |
| | Manifest Reference Number: _____ | | | | | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | | |
| | Facility's Phone: _____ | | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | | | | | | Month | | Day | Year |
| | | | | | | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | | | |
| 1. <i>H110</i> | | 2. | | 3. | | 4. | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a | | | | | | | | | | | |
| Printed/Typed Name <i>Charles Swope</i> | | | | | Signature <i>[Signature]</i> | | Month | | Day | Year | |
| | | | | | | | 09 | | 04 | 13 | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

| | | | | | | |
|--|---|--|--|---|---|----------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH00001773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 555-5853 | 4. Manifest Tracking Number 011719227 JJK | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE. WARREN, OH 44483 | | | Generator's Site Address (if different than mailing address) | | | |
| Generator's Phone: (330) 847-6119 | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, JV | | | (216) 642-1311 | | U.S. EPA ID Number OH0017730540 | |
| 7. Transporter 2 Company Name | | | | | U.S. EPA ID Number | |
| 8. Designated Facility Name and Site Address MILWAUKEE DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | U.S. EPA ID Number MID000724831 | |
| Facility's Phone: (800) 592-5488 | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. |
| | | | No. | Type | | |
| | 1. | HAZARDOUS WASTE, SOLID H.O.S. 5.1 HIGHLY FLAMMABLE (K061), EPS 171 APPR # JTX005MD | 001 | DR | 17 | 7 |
| | 2. | | | | | |
| | 3. | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 14. Special Handling Instructions and Additional Information Bot # UESH 3044 SERVICE RECORD # 179950 | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | |
| Generator's/Officer's Printed/Typed Name Dustin Morris | | | Signature [Signature] | | Month Day Year 9 2 13 | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____ | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Ed Spychalski | | | Signature [Signature] | | Month Day Year 9 12 13 |
| | Transporter 2 Printed/Typed Name JOSEPH M RINK | | | Signature [Signature] | | Month Day Year 9 06 13 |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | |
| | Manifest Reference Number: _____ | | | | | |
| | 18b. Alternate Facility (or Generator) _____ U.S. EPA ID Number _____ | | | | | |
| | Facility's Phone: _____ | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) _____ Month Day Year _____ | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| | 1. 10 | 2. | 3. | 4. | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a | | | | | | |
| | Printed/Typed Name Charles Swope | | | Signature [Signature] | | Month Day Year 09 06 13 |

| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OHIP000007773 | | 2. Page 1 of 1 | | 3. Emergency Response Phone (800) 535-5053 | | 4. Manifest Tracking Number 011716452 JJK | |
|--|--|---|------|-----------------------|---------------------------------|--|-----------------------------------|--|--|
| | | 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | | | | Generator's Site Address (if different than mailing address) | |
| Generator's Phone: (216) 347-8110 | | 6. Transporter 1 Company Name ENVROSERVE, INC. | | | | | | U.S. EPA ID Number OH-EP017730540 | |
| | | 7. Transporter 2 Company Name | | | | | | U.S. EPA ID Number | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-91 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | | | | U.S. EPA ID Number | |
| Facility's Phone: (800) 582-5489 | | | | | | | | MD160724831 | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes | | | |
| | | No. | Type | | | | | | |
| X | 1. RD. NA3077. HAZARDOUS WASTE. SOLID. N.O.S. - POOR (ENV DUST K061), ERG 171 | 001 | DR | 12 | L | K061 | | | |
| | 2. | | | | | | | | |
| | 3. | | | | | | | | |
| | 4. | | | | | | | | |
| 14. Special Handling Instructions and Additional Information Box # 56V3040 | | | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | | | |
| Generator's/Officer's Printed/Typed Name Dustin Morris | | | | | Signature <i>[Signature]</i> | | Month Day Year 9 4 13 | | |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | | | | | |
| Transporter 1 Printed/Typed Name Ed Spuchda | | | | | Signature <i>[Signature]</i> | | Month Day Year 09 04 13 | | |
| Transporter 2 Printed/Typed Name | | | | | Signature | | Month Day Year | | |
| 18. Discrepancy | | | | | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | | | | |
| Manifest Reference Number: | | | | | | | | | |
| 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | | | | |
| Facility's Phone: | | | | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) | | | | | | | Month Day Year | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | | | |
| 1. none | | 2. | | 3. | | 4. | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | | | |
| Printed/Typed Name David Tamm | | | | | Signature <i>[Signature]</i> | | Month Day Year 9 4 13 | | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

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|--|---|--|--|---|---|--------------------------|--|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OHF000007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011719225 JJK | | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE, WARREN, OH 44483 | | | Generator's Site Address (if different than mailing address) | | | | |
| Generator's Phone: (330) 847-6119 | | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, J.V. | | | (216) 942-1311 | | U.S. EPA ID Number OH0017730540 | | |
| 7. Transporter 2 Company Name | | | | | U.S. EPA ID Number | | |
| 8. Designated Facility Name and Site Address MILWAUKEE DISPOSAL WASTE TREATMENT PLANT 49350 N. 1-04 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | U.S. EPA ID Number MID000724831 | | |
| Facility's Phone: (800) 592-5439 | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | |
| | | | No. | Type | | | |
| | 1. | RQ. NA3077, HAZARDOUS WASTE, SOLID R.O.S. 5 PGM (EAF DUST K061), ERC 171 APPL # JTA05340 | 001 | CA | 17 | 7 | |
| | 2. | | | | | | |
| | 3. | | | | | | |
| | 4. | | | | | | |
| 14. Special Handling Instructions and Additional Information box # WSH3043 | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generator's/Officer's Printed/Typed Name John Rodgers | | | Signature <i>[Signature]</i> | | Month Day Year 9 4 13 | | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | |
| | Transporter signature (for exports only): _____ | | | | | | |
| TRANSPORTER | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| | Transporter 1 Printed/Typed Name Kenneth Loring | | | Signature <i>[Signature]</i> | | Month Day Year 9 4 13 | |
| | Transporter 2 Printed/Typed Name | | | Signature | | Month Day Year | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | |
| | Manifest Reference Number: _____ | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | |
| | Facility's Phone: _____ | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | Month Day Year | |
| | 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| | 1. H110 | 2. | 3. | 4. | | | |
| | 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| | Printed/Typed Name Charles DeHone | | | Signature <i>[Signature]</i> | | Month Day Year 1 3 13 | |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

| | | | | | | | |
|---|---|--|-------------------|--|---|--------------------------|----------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH-9000067773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011719366 JJK | | |
| 5. Generator's Name and Mailing Address WILSON BUILDINGS LLC 4000 MAHOMING AVE, WARREN, OH 44483 (330) 847-4118 | | | | Generator's Site Address (if different than mailing address) | | | |
| 6. Transporter 1 Company Name ENVIRONSERVE J.V. (216) 642-1311 | | | | U.S. EPA ID Number OH0017730540 | | | |
| 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | | |
| 8. Designated Facility Name and Site Address WILSON WASTE TREATMENT PLANT 49350 N. 1-01 SERVICE DRIVE, BELLEVILLE, MI 48111 (800) 582-5489 | | | | U.S. EPA ID Number MI0000724831 | | | |
| Facility's Phone: | | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
| | | | No. | Type | | | |
| | 1. | RG, HAZARDOUS WASTE, SOLID, H.O.S. 3, FILL (EPA DUST K061), ERG 171 APPR # 170055MD | 001 | CM | 8 | T | K061 |
| | 2. | | | | | | |
| | 3. | | | | | | |
| | 4. | | | | | | |
| 14. Special Handling Instructions and Additional Information box #SEV3040 | | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | | |
| Generator's/Offeror's Printed/Typed Name John Rodgers | | | | Signature John Rodgers | | Month Day Year 9 5 13 | |
| INT'L | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Kenneth Loring | | | | Signature Kenneth Loring | | Month Day Year 09 05 13 |
| | Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | |
| | Manifest Reference Number: | | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | |
| | Facility's Phone: | | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | | Month Day Year |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | | |
| | 1. | 2. | 3. | 4. | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | | |
| Printed/Typed Name David Tarraki | | | | Signature David Tarraki | | Month Day Year 9 6 13 | |

| | | | | | | |
|---|--|---|----------------|---|--|----------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH-0000007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011716453 JJK | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE. WARREN, OH 44483 | | | | | | |
| Generator's Site Address (if different than mailing address) | | | | | | |
| Generator's Phone: (330) 847-8110 | | | | | | |
| 6. Transporter 1 Company Name EMVROSERVE JV | | | | | U.S. EPA ID Number OH-00017730540 | |
| 7. Transporter 2 Company Name | | | | | U.S. EPA ID Number | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | | U.S. EPA ID Number MI-0000724831 | |
| Facility's Phone: (800) 582-5480 | | | | | | |
| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | | | 10. Containers | | 11. Total Quantity |
| | | | | No. | Type | 12. Unit Wt./Vol. |
| X | 1. RD. HAZARDOUS WASTE, SOLID, N.O.S., 9 PGH (EAF DAST K061), ERS 171 | | | 001 | DR | 13 |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |
| 13. Waste Codes K061 | | | | | | |
| 14. Special Handling Instructions and Additional Information Bot # SEV3041 ✓ | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | |
| Generator's/Officer's Printed/Typed Name Dustin MORRIS | | | | Signature [Signature] | | Month Day Year 9 5 13 |
| 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____ | | | | | | |
| 17. Transporter Acknowledgment of Receipt of Materials | | | | | | |
| Transporter 1 Printed/Typed Name Ed Spychala | | | | Signature [Signature] | | Month Day Year 09 05 13 |
| Transporter 2 Printed/Typed Name | | | | Signature | | Month Day Year |
| 18. Discrepancy | | | | | | |
| 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | | |
| Manifest Reference Number: | | | | | | |
| 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | | |
| Facility's Phone: | | | | | | |
| 18c. Signature of Alternate Facility (or Generator) Month Day Year | | | | | | |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| 1. 1110 2. 3. 4. | | | | | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in item 18a | | | | | | |
| Printed/Typed Name Charles Swope | | | | Signature [Signature] | | Month Day Year 09 05 13 |

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

| | | | | | | |
|--|---|--|----------------|--|---|--------------------------|
| UNIFORM HAZARDOUS WASTE MANIFEST | | 1. Generator ID Number OH19000007773 | 2. Page 1 of 1 | 3. Emergency Response Phone (800) 535-5053 | 4. Manifest Tracking Number 011716387 JJK | |
| 5. Generator's Name and Mailing Address WARREN STEEL HOLDINGS LLC 4000 MAHONING AVE. WARREN, OH 44483 | | | | Generator's Site Address (if different than mailing address) | | |
| Generator's Phone: (330) 847-8119 | | | | | | |
| 6. Transporter 1 Company Name ENVIROSERVE, L.V. | | | | U.S. EPA ID Number OH10017730540 | | |
| 7. Transporter 2 Company Name | | | | U.S. EPA ID Number | | |
| 8. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 | | | | U.S. EPA ID Number MID000724831 | | |
| Facility's Phone: (800) 582-5488 | | | | | | |
| GENERATOR | 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers | | 11. Total Quantity | 12. Unit Wt./Vol. |
| | | | No. | Type | | |
| | X | 1. PG. NA3077. HAZARDOUS WASTE, SOLID, N.O.S. 9 PGIII (EAF DUST K061), ERG 171 APPX # 1110000001 | 001 | CM | 14 | T |
| | | 2. | | | | |
| | | 3. | | | | |
| | | 4. | | | | |
| 14. Special Handling Instructions and Additional Information box# WSH3043 | | | | | | |
| 15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. | | | | | | |
| Generator's/Offor's Printed/Typed Name Gene Ward | | | | Signature Gene Ward | | Month Day Year 9 7 13 |
| INTL | 16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter signature (for exports only): _____ Date leaving U.S.: _____ | | | | | |
| | 17. Transporter Acknowledgment of Receipt of Materials | | | | | |
| TRANSPORTER | Transporter 1 Printed/Typed Name Kenneth Loring | | | | Signature Kenneth Loring | |
| | Transporter 2 Printed/Typed Name | | | | Signature | |
| DESIGNATED FACILITY | 18. Discrepancy | | | | | |
| | 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection | | | | | |
| | Manifest Reference Number: | | | | | |
| | 18b. Alternate Facility (or Generator) U.S. EPA ID Number | | | | | |
| | Facility's Phone: | | | | | |
| | 18c. Signature of Alternate Facility (or Generator) | | | | | Month Day Year |
| 19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) | | | | | | |
| | 1. | 2. | 3. | 4. | | |
| 20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a | | | | | | |
| | Printed/Typed Name John S. Loring | | | | Signature John S. Loring | |
| | | | | | Month Day Year 9 7 13 | |

SI-WS-05



MCS Environmental Laboratory

438A Old Trolley Road Summerville SC 29485

Phone: 843-873-5788 Mobile: 843-810-6593 Email: Marty@mcs Shannon.com

Analysis Report

Date Reported: 3/8/07 3:39:11 PM

Attn: Mike Shannon
Allegheny Raw Materials
269B Pleasantview Drive
Midland PA 15059

Work Order#: 4015 Non Regulatory: ☐
Project: Warren Bag House Dust
Verified By: MAS
Requested Days to Complete: 1-2 3-5 10
☐ ☐ ☒

Received By: MAS On: 3/7/07 At: 12:05 Delivered By: USP # Containers: 3 # Samples: 3 Cooler On: 0
Comments Don's Cell: 724-494-9581

| Analyte | Result | Sampled | At | By | Method | D.L. | SCLID | Lmt |
|---|-----------|---------|-------|-----|-----------|-------|-------|--------------------------|
| Location: WBHD - 1 | | 3/5/07 | | MOS | 6593 | | SO | |
| Grab <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Preservative: | | | | | | | | |
| | | | | | | | | |
| Solid Sample Digestion for Metals | 1.0 grams | 3/8/07 | 10:00 | MAS | EPA 3050B | | | <input type="checkbox"/> |
| Total Aluminum | 0.93 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.003 | | <input type="checkbox"/> |
| Total Beryllium | ND % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Cadmium | 0.005 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Chromium | 0.8 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Cobalt | 0.008 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Copper | 0.1 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Iron | 25 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Manganese | 7.0 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Molybdenum | 0.28 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Nickel | 0.4 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Tin | 0.024 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.02 | | <input type="checkbox"/> |
| Total Titanium | 0.049 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Tungsten | 0.15 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Vanadium | 0.023 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Zinc | 8.5 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Location: WBHD - 2 | | 3/5/07 | | MOS | 6594 | | SO | |
| Grab <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Preservative: | | | | | | | | |
| | | | | | | | | |
| Solid Sample Digestion for Metals | 1.0 grams | 3/8/07 | 10:00 | MAS | EPA 3050B | | | <input type="checkbox"/> |
| Total Aluminum | 0.9 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.003 | | <input type="checkbox"/> |
| Total Beryllium | ND % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Cadmium | 0.004 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Chromium | 1.0 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Cobalt | 0.008 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Copper | 0.1 % | 3/8/07 | 15:00 | MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |

Approved By:

Martin Alan Shannon, Laboratory Director

South Carolina Laboratory Identification Code: 18553

Page 1 of 2



MCS Environmental Laboratory

483A Old Trolley Road Summerville SC 29485

Phone: 843-878-5788 Mobile: 843-810-6598 Email: Marty@mcs Shannon.com

Analysis Report

Date Reported: 3/8/07 3:39:11 PM

Atten: Mike Shannon
Allegheny Raw Materials
269B Pleasantview Drive
Midland

PA 15059

Work Order#: 4015 Non Regulatory: ☐
Project: Warren Bag House Dust
Verified By: MAS
Requested Days to Complete: 1-2 3-5 10
☐ ☐ ☒

Received By: MAS On: 3/7/07 At: 12:05 Delivered By: USP # Containers: 3 # Samples: 3 Cooler On: 0
Comments Don's Cell: 724-494-9581

| Analyte | Result | Analyzed By | Method | D.L. | SCLID | Lmt |
|--|-----------|------------------|-----------|-------|-------|--------------------------|
| Total Iron | 28 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Manganese | 7.7 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Molybdenum | 0.43 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Nickel | 0.75 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Tin | 0.02 % | 3/8/07 15:00 MAS | EPA 6010B | 0.02 | | <input type="checkbox"/> |
| Total Titanium | 0.055 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Tungsten | 0.15 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Vanadium | 0.023 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Zinc | 7.3 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Location: WBHD - 3 Sampled: 3/5/07 At: By: MOS Sample#: 6595 Matrix: SO | | | | | | |
| Grab <input checked="" type="checkbox"/> Composite <input type="checkbox"/> Preservative: Program: OTHER | | | | | | |
| Solid Sample Digestion for Metals | 1.0 grams | 3/8/07 10:00 MAS | EPA 3050B | | | <input type="checkbox"/> |
| Total Aluminum | 0.92 % | 3/8/07 15:00 MAS | EPA 6010B | 0.003 | | <input type="checkbox"/> |
| Total Beryllium | ND % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Cadmium | 0.006 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Chromium | 0.8 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Cobalt | 0.007 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Copper | 0.12 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Iron | 27 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Manganese | 6.9 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Molybdenum | 0.29 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Nickel | 0.7 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Tin | 0.028 % | 3/8/07 15:00 MAS | EPA 6010B | 0.02 | | <input type="checkbox"/> |
| Total Titanium | 0.05 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Tungsten | 0.2 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Vanadium | 0.023 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |
| Total Zinc | 10 % | 3/8/07 15:00 MAS | EPA 6010B | 0.002 | | <input type="checkbox"/> |

Approved By:

Martin Alan Shannon, Laboratory Director

South Carolina Laboratory Identification Code: 18553

Page 2 of 2

CEL Cardinal Laboratories, Inc.

2870 Salt Springs Road • Youngstown, Ohio 44509

Ph: (330) 797-8844 • Fax: (330) 797-3264 • 1-800-523-0347

E-mail: cel@cardinalenvirolabs.net

Laboratory Analysis Report

Client: ODYSSEY ENVIRONMENTAL
Attn: STEVE GRUBBER
5752 W. WEBB RD
YOUNGSTOWN, OHIO 44515

Lab Number: 212031502
Sample ID: SLUDGE PRESS CAKE

Date Sampled: 3/14/2012

Time Sampled: 16:00

Date Received: 3/15/2012

Report Date: 3/28/2012

Sample Description:

Sampler Name: LARRY FRANGOS Jr.

Sample Matrix: Sludge

PO#:

Comments:

* Denotes matrix interference

| Analyte | Result | Unit | Detection Limit | Method | Analysis Date | Analyst |
|----------------------------------|---------------|----------|-----------------|------------|---------------|---------|
| Ignitability/Flashpoint | >180 | °F | | 1010 | 3/16/2012 | DT |
| Mercury | BDL | mg/L | 0.0008 | 7470 | 3/19/2012 | TP |
| Paint Filter Liquids Test | NO FILTRATION | mL/100 g | 1.0 | 9095A | 3/15/2012 | DT |
| pH | 8.74 | S.U. | | 9045 D | 3/15/2012 | TP |
| Prep | | | | 3510 | 3/21/2012 | JP |
| Prep - ICP Metals | | | | 6010 | 3/16/2012 | TP |
| Prep - PCB | | | | 3550 | 3/20/2012 | JP |
| TCLP-Extraction (Initial pH) | 8.88 | S.U. | | 40CFR 1311 | 3/15/2012 | TP |
| Arsenic | BDL | mg/L | 0.500 | 6010 | 3/16/2012 | TP |
| Barium | 0.563 | mg/L | 0.100 | 6010 | 3/16/2012 | TP |
| Cadmium | BDL | mg/L | 0.100 | 6010 | 3/16/2012 | TP |
| Chromium | BDL | mg/L | 0.100 | 6010 | 3/16/2012 | TP |
| Lead | BDL | mg/L | 0.300 | 6010 | 3/16/2012 | TP |
| Selenium | BDL | mg/L | 0.500 | 6010 | 3/16/2012 | TP |
| Silver | BDL | mg/L | 0.100 | 6010 | 3/16/2012 | TP |
| Polychlorinated Biphenyls (PCBs) | | | | 8082 | | |
| PCB-1016 | BDL | mg/kg | 1 | 8082 | 3/21/2012 | JP |
| PCB-1221 | BDL | mg/kg | 2 | 8082 | 3/21/2012 | JP |
| PCB-1232 | BDL | mg/kg | 1 | 8082 | 3/21/2012 | JP |
| PCB-1242 | BDL | mg/kg | 1 | 8082 | 3/21/2012 | JP |
| PCB-1248 | BDL | mg/kg | 1 | 8082 | 3/21/2012 | JP |
| PCB-1254 | BDL | mg/kg | 1 | 8082 | 3/21/2012 | JP |
| PCB-1260 | BDL | mg/kg | 1 | 8082 | 3/21/2012 | JP |
| SURROGATES | | | | 8082 | | |
| TCMX | 51 | | 23-123 % | 8082 | 3/21/2012 | JP |
| DCBP | 42 | | 30-107 % | 8082 | 3/21/2012 | JP |
| TCLP-Volatiles (VOC) | | | | 8260/5030 | | |
| Benzene | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| Carbon Tetrachloride | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| Chlorobenzene | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| Chloroform | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| 1,2-Dichloroethane | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |

Lab Number: 212031502

JI-WS-06

CEL Cardinal Laboratories, Inc.

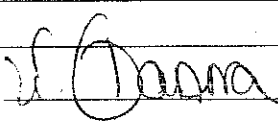
| | | | | | | |
|-----------------------|-----|------|---------|-----------|-----------|----|
| 1,1-Dichloroethene | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| 2-Butanone | BDL | mg/L | 0.5 | 8260/5030 | 3/19/2012 | JP |
| Tetrachloroethene | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| Trichloroethene | BDL | mg/L | 0.05 | 8260/5030 | 3/19/2012 | JP |
| Vinyl Chloride | BDL | mg/L | 0.1 | 8260/5030 | 3/19/2012 | JP |
| SURROGATES | | | | 8260/5030 | | |
| Dibromofluorobenzene | 112 | | 86-118% | 8260/5030 | 3/19/2012 | JP |
| Toluene-d8 | 94 | | 88-110% | 8260/5030 | 3/19/2012 | JP |
| Bromofluorobenzene | 92 | | 86-115% | 8260/5030 | 3/19/2012 | JP |
| TCLP-Semi-Volatiles | | | | 8270 | | |
| Cresols | BDL | mg/L | 0.2 | 8270 | 3/27/2012 | JP |
| 1,4-Dichlorobenzene | BDL | mg/L | 0.04 | 8270 | 3/27/2012 | JP |
| 2,4-Dinitrotoluene | BDL | mg/L | 0.04 | 8270 | 3/27/2012 | JP |
| Hexachlorobenzene | BDL | mg/L | 0.04 | 8270 | 3/27/2012 | JP |
| Hexachlorobutadiene | BDL | mg/L | 0.04 | 8270 | 3/27/2012 | JP |
| Hexachloroethane | BDL | mg/L | 0.04 | 8270 | 3/27/2012 | JP |
| Nitrobenzene | BDL | mg/L | 0.04 | 8270 | 3/27/2012 | JP |
| Pentachlorophenol | BDL | mg/L | 0.2 | 8270 | 3/27/2012 | JP |
| Pyridine | BDL | mg/L | 0.1 | 8270 | 3/27/2012 | JP |
| 2,4,5-Trichlorophenol | BDL | mg/L | 0.2 | 8270 | 3/27/2012 | JP |
| 2,4,6-Trichlorophenol | BDL | mg/L | 0.2 | 8270 | 3/27/2012 | JP |
| SURROGATES | | | | 8270 | | |
| Nitrobenzene-d5 | 67 | | 35-114% | 8270 | 3/27/2012 | JP |
| 2-Fluorobiphenyl | 95 | | 43-116% | 8270 | 3/27/2012 | JP |
| p-Terphenyl | 129 | | 33-141% | 8270 | 3/27/2012 | JP |
| 2-Fluorophenol | 8 * | | 25-100% | 8270 | 3/27/2012 | JP |
| Phenol-d6 | 12 | | 11-94% | 8270 | 3/27/2012 | JP |
| 2,4,6-Tribromophenol | 5 * | | 16-123% | 8270 | 3/27/2012 | JP |

BDL = Below Detection Limit

Results approved by:

John Pflugh, Lab Manager _____

Tricia Presco, Chemist _____

Wendy Hanna, Customer Relations  _____

Ohio EPA Drinking Water Certification: 1549, 898

Pennsylvania Laboratory Registration: 68-948



Client Name _____ PO# _____
Address _____ City/State _____ Zip _____ Phone _____

ANALYSIS REQUIRED

[illegible]

| | | |
|-----------|-----------------------------------|---------------------------------|
| Date/Time | Received By <i>Tricia Puro</i> | Date/Time <i>3/15/12 839</i> |
| Date/Time | Received By | Date/Time |

3/15/12 839

Date/Time

Parameters quoted by
Sandy at Republic
Carbon



WASTE CHARACTERIZATION REPORT

Tracking #

☐ I authorize EQ - The Environmental Quality Company to choose the appropriate facility and method of waste management from the technologies offered at the EQ facilities identified below.

| | | |
|--|---|-------------------------|
| <input checked="" type="checkbox"/> Michigan Disposal Waste Treatment Plant (Stabilization and Treatment) | 49350 N. I-94 Service Drive, Belleville, MI 48111 Phone: 800-992-5489 Fax: 800-992-5329 | EPA ID# MID 000 724 831 |
| <input type="checkbox"/> Wayne Disposal, Inc. Site #2 Landfill (Hazardous & PCB Waste Landfill) | 49350 N. I-94 Service Drive, Belleville, MI 48111 Phone: 800-992-5489 Fax: 800-992-5329 | EPA ID# MID 048 090 633 |
| <input type="checkbox"/> EQ Detroit, Inc. (Stabilization, Wastewater Treatment) | 1923 Frederick Street, Detroit, MI 48211 Phone: (313) 923-9080 Fax: 313-923-3375 | EPA ID# MID 980 991 566 |
| <input type="checkbox"/> EQ Resource Recovery, Inc. (Solvent Recycling, Fuel Blending, WW Treatment) | 36345 Van Born Road, Romulus, MI 48174 Phone: 866-373-8357 Fax: 734-326-4033 | EPA ID# MID 060 975 844 |
| <input type="checkbox"/> EQ North Carolina (Stabilization, Treatment, Labpack, Decommissioning) | 1003 Investment Blvd, Apex, NC 27502 Phone: 919-363-4700 Fax: 919-363-4714 | EPA ID# NCD 982 170 292 |
| <input type="checkbox"/> EQ Florida, Inc. (Drum Consolidation, Labpack Decommissioning) | 7202 East 8th Ave, Tampa, FL 33614 Phone: 813-623-5463 Fax: 813-628-0842 | EPA ID# FLD 981 932 494 |
| <input type="checkbox"/> EQ Transfer & Processing (Drum Transfer/Universal Waste Handling) | 2000 Ferry Street, Detroit, MI 48211 Phone: 313-923-0080 Fax: 313-922-8419 | EPA ID# MIK 939 928 313 |
| <input type="checkbox"/> EQ Indianapolis (Drum Transfer/Non-Hazardous Waste Processing) | 4000 West 10th Street, Indianapolis, IN 46222 Phone: 317-247-7160 Fax: 317-247-7170 | EPA ID# IND 161 049 309 |
| <input type="checkbox"/> EQ Atlanta (Drum Transfer/Non-Hazardous Waste Processing) | 5600 Fulton Industrial Blvd, SW, Atlanta, GA 30336 Phone: 404-494-3520 Fax: 404-494-3560 | EPA ID# GAR 000 039 776 |
| <input type="checkbox"/> EQ Augusta, Inc. (Wastewater Treatment) | 3920 Ooshen Industrial Blvd, Augusta, GA 30906 Phone: 706-771-9100 Fax: 706-771-9124 | EPA ID# GAR 000 011 817 |

Waste Common Name: K061 ELECTRIC ARC DUST

Section 1 - Generator & Customer Information

| SIC/NAICS* | Internal Use Only: EQ Division |
|---|--|
| Generator EPA ID # OHR000007773 | EQ Customer No. 848 |
| Generator WARREN STEEL HOLDINGS LLC | Invoicing Company American Waste Management Services |
| Facility Address 4000 MAHONING AVE | Address One American Way |
| City WARREN State OHIO Zip 44484 | City Warren State OH Zip 44484 |
| County TRUMBULL | Country USA |
| Mailing Address SAME | Invoicing Contact Paula Monske |
| City State Zip | Phone (330)856-8860 Fax (330)856-8484 |
| Generator Contact HOPE DROPP | Technical Contact TOM VELIKOVICH |
| Title ENVIRONMENTAL MGR. | Phone 330-283-6823 Fax |
| Phone 330-979-5857 Fax | Mobile Pager |
| *For a list of NAICS codes, please refer to Section 9 of the EQ Resource Guide. | E-mail |

Section 2 - Shipping & Packaging Information

2.1) Shipping Volume & Frequency 400

☐ One Time Only ☐ Year ☐ Quarter ☒ Month

2.2) DOT Shipping Name RQ, HAZARDOUS WASTE SOLID, NOS

2.3) Is this waste surcharge exempt? ☐ Yes ☒ No

If yes, please attach a surcharge exemption form, found in Section 2 of the EQ Resource Guide.

2.4) Packaging (check all that apply)

☐ Bulk Solid (Yd³ < 2000 lbs/yd³)

☒ Bulk Solid (Ton > 2000 lbs/yd³)

☐ Bulk Liquids (Gallon)

☐ Totes, Size

☐ Cubic Yard Boxes/Brigs

☐ Drums, Size

☐ Other (palletized, 5 gal. Pail, etc.)

Quoted bulk disposal charges for solid materials will be billed by the cubic yard, if the waste density is less than 2,000 lbs./cubic yard. If waste density is greater than 2,000 lbs./cubic yard, then bulk disposal charges will be billed by the ton, regardless of the approved container.

2.3 PLAN SIGNATURE AND REVIEW

The SWPPP must be signed by either the permittee or an authorized representative in accordance with 40 CFR 122.22. The required signatures for this plan are provided on the Certification page at the front of this plan.

The SWPPP will be reviewed and amended as needed to ensure continued compliance with the Facility's NPDES Permit. A review of the SWPPP will be performed under the following circumstances:

- Annually;
- In the event of a spill that impacts storm water and this plan is found to be inadequate in preventing or responding to the spill;
- In the event of the addition of any new sources of significant materials; and
- In the event of a change in operations which will have a significant effect on the potential to contaminate storm water runoff.

Section 3 - Physical Characteristics

- 3.1) Color RED/BROWN 3.2) Odor NONE
- 3.3) Does this waste contain any "Potentially Odorous Constituents" as defined in the EQ Resource Guide? (Section 3) ☐ Yes ☒ No
- 3.4) Physical State at 70°F: ☒ Solid ☒ Dust/Powder ☐ Liquid ☐ Sludge
- 3.5) What is the pH of this waste? ☐ ≤2 ☐ 2.1-4.9 ☐ 5-10 ☐ 10.1-12.4 ☐ ≥12.5
- 3.6) What is the flash point of this waste? ☐ ≤90°F ☐ 90-140°F ☐ 140-199°F ☐ ≥200°F
- 3.7) Does this waste contain? (check all that apply) ☒ None ☐ Free Liquids ☐ Oily Residue ☐ Metal Fines
- ☐ Biodegradable Sorbents ☐ Amines ☐ Ammonia ☐ Water Reactive ☐ Biohazard ☐ Aluminium
- ☐ Shock Sensitive Waste ☐ Reactive Waste ☐ Radioactive Waste ☐ Explosives ☐ Pyrophoric Waste ☐ Isocyanates
- ☐ Asbestos - non-friable ☐ Asbestos - friable ☐ Dioxins ☐ Furans

Section 4 - Waste Composition and Generating Process

4.1) Describe the physical composition of the waste (i.e., soil, water, PPE, debris, key chemical compounds, etc.)

RUST: 50 to 60 % to %

DIRT: 50 to 60 % to %

Total: 100%

4.2) Provide a detailed description of the process generating this waste (attach flow diagram if available).

DUST GENERATED FROM STEEL MANUFACTURING WITH ELECTRIC FURNACE

Section 5 - Is This Hazardous Waste?

Please refer to Section 5 of the EQ Resource Guide for a list of waste codes

As determined by 40 CFR, Part 261 and State Rules:

Please list applicable waste code(s):

- 5.1) Is this an EPA RCRA listed hazardous waste (F, K, P or U)? ☒ Yes ☐ No K061
- 5.2) Is this an EPA RCRA characteristic hazardous waste (D001-D043)? ☐ Yes ☒ No
- 5.3) Do any State Hazardous Waste Codes apply? ☐ Yes ☒ No
- 5.4) Is this waste intended for wastewater treatment? ☐ Yes ☒ No

If you answered 'no' to 5.1, 5.2, and 5.3, please skip to Section 7. If you answered 'yes' to 5.4, please attach the Waste Characterization Report Addendum found in Section 7 of the EQ Resource Guide.

Section 6 - Hazardous Wastes

- 6.1) Does this waste exceed Land Disposal Restriction levels? ☒ Yes ☐ No
- 6.1a) If this waste stream is greater than 50% soil, does it meet the alternative soil treatment standards of 40 CFR 268.49? ☐ Yes ☒ No
- 6.1b) Does this waste contain greater than 50% debris, by volume? (Debris is greater than 2.5 inches in size.) ☐ Yes ☒ No
- 6.2) Is the waste an oxidizer (D001)? ☐ Yes ☒ No
- 6.3) Does this waste contain reactive cyanide ≥ 250 ppm (D003)? ☐ Yes ☒ No
- 6.4) Does this waste contain reactive sulfide ≥ 500 ppm (D003)? ☐ Yes ☒ No
- 6.5) Please indicate which constituent concentrations are below or above the regulatory level. Please indicate the basis used in the determination. Either "Below" or "Above" MUST be checked for each constituent.

Based On: ☒ Generator Knowledge ☐ Analysis ☐ MSDS

*Please attach a copy. Analysis or MSDS are required for EQL Non-hazardous wastes.

| Code | Regulatory Level TCLP (mg/l) | Concentration (if above) | Code | Regulatory Level TCLP (mg/l) | Concentration (if above) |
|------|---------------------------------|--|------|---------------------------------|--|
| D004 | Arsenic 5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D024 | m-Cresol 200 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D005 | Barium 100 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D025 | p-Cresol 200 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D006 | Cadmium 1 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D026 | Cresols 200 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D007 | Chromium 5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D027 | 1,4-Dichlorobenzene 7.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D008 | Lead 5 | <input type="checkbox"/> Below <input checked="" type="checkbox"/> Above | D028 | 1,2-Dichloroethane 0.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D009 | Mercury 0.2 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D029 | 1,1-Dichloroethylene 0.7 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D010 | Selenium 1 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D030 | 2,4-Dinitrotoluene 0.13 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D011 | Silver 5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D031 | Heptachlor 0.008 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D012 | Endrin 0.02 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D032 | Hexachlorobenzene 0.13 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D013 | Lindane 0.4 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D033 | Hexachlorobutadiene 0.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D014 | Methoxychlor 10 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D034 | Hexachloroethane 3.0 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D015 | Toxaphene 0.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D035 | Methyl Ethyl Ketone 200 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D016 | 2,4-D 10 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D036 | Nitrobenzene 2 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D017 | 2,4,5-TP (Silvex) 1 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D037 | Penachlorophenol 100 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D018 | Benzene 0.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D038 | Pyridine 5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D019 | Carbon Tetrachloride 0.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D039 | Tetrachloroethylene 0.7 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D020 | Chlordane 0.03 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D040 | Trichloroethylene 0.5 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D021 | Chlorobenzene 100 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D041 | 2,4,6-Trichlorophenol 400 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D022 | Chloroform 6.0 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D042 | 2,4,6-Trichlorophenol 2 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |
| D023 | o-Cresol 200 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above | D043 | Vinyl Chloride 0.2 | <input checked="" type="checkbox"/> Below <input type="checkbox"/> Above |

6.6) If this is a characteristic hazardous waste, does it contain underlying hazardous constituents?

☒ Yes ☐ No

If yes, please list the constituents in Section 11.

Section 7 - Non-Hazardous Wastes

For a complete list of non-hazardous waste codes, please refer to Section 7 of the EQ Resource Guide.

Please list applicable waste codes:

- 7.1) Is this a Michigan non-hazardous liquid industrial waste? ☐ Yes ☒ No
 7.2) Is this a Universal waste? ☐ Yes ☒ No
 7.3) Is this a Recyclable Commodity? (e.g., computer monitors, free mercury, etc.) ☐ Yes ☒ No
 7.4) Is this waste a recoverable petroleum product? ☐ Yes* ☒ No
 7.5) Is this waste used oil as defined by 40 CFR Part 279? ☐ Yes* ☒ No

If you answered "yes" to questions 7.4 or 7.5 please attach the Waste Characterization Report Addendum found in Section 7 of the EQ Resource Guide.

Section 8 - TSCA Information

- 8.1) What is the concentration of PCBs in the waste? ☒ None ☐ 0-5 ppm ☐ 6-49 ppm ☐ 50-499 ppm ☐ 500+ ppm
 8.2) Does the waste contain PCB contamination from a source with a concentration ≥ 50 ppm? ☐ Yes ☒ No
 If you answered "no" to 8.1 and 8.2, please skip to Section 9.
 8.3) Has this waste been processed into a non-liquid form? ☐ Yes ☒ No
 If yes, what was the concentration of PCBs prior to processing? ☒ N/A ☐ 0-499 ppm ☐ 500+ ppm
 8.4) Is the non-liquid PCB waste in the form of soil, rags, debris, or other contaminated media? ☐ Yes ☒ No
 8.5) Are you a PCB capacitor manufacturer or a PCB equipment manufacturer? ☐ Yes ☒ No
 8.6) Has the PCB Article (e.g., transformer, hydraulic machine, PCB-contaminated electrical equipment) been drained/flushed of all PCBs and decontaminated in accordance with 40 CFR 761.60(b)? ☒ N/A ☐ Yes ☐ No

Section 9 - Clean Air Act Information

- 9.1) Is this waste subject to regulation under 40 CFR, Part 63, Subpart DD or 40 CFR, Part 264, Subpart CC (RCRA)? ☐ Yes ☒ No
 (Does the waste contain >500 ppm Volatile Organic Hazardous Air Pollutants - VOHAP's or Volatile Organic Compounds - VOC's?)
 For a complete list of VOHAP's, please see Section 11 of the EQ Resource Guide.
 9.2) Is the site, or waste, subject to any other MACT or NESHAP? ☐ Yes, please specify: ☒ No
 9.3) Does this waste stream contain Benzene? ☐ Yes ☒ No
 If you answered "no" to 9.1, please skip to Section 10.
 9.4) Does the waste stream come from a facility with one of the SIC/NAICS codes listed under the Benzene NESHAP identified in 40 CFR 61, Subpart FF? ☐ Yes ☒ No
 9.5) Is the generating source of this waste stream a facility with Total Annual Benzene (TAB) ≥ 10 Mg/year? ☐ Yes ☒ No
 For assistance in calculating the TAB, please see the TAB Worksheet in Section 9 of the EQ Resource Guide.
 If you answered "no" in question 9.4 and 9.5, please skip to Section 10.
 9.6) Does the waste contain $>10\%$ water? ☐ Yes ☒ No
 9.7) What is the TAB quantity for your facility? _____ Mg/Year ☐ Yes ☒ No
 9.8) Does the waste contain >1.0 mg/kg total Benzene? ☐ Yes ☒ No
 9.9) What is the total Benzene concentration in your waste? _____ Percent or _____ ppmw. ☐ Yes ☒ No

(Supporting analysis must be attached. Do not use TCLP analytical results. Acceptable laboratory methods include 8020, 8240, 8260, 602 and 624.)

*For a list of NAICS codes, please refer to Section 9 of the EQ Resource Guide.

Section 10 - Fuel Blending Information

- 10.1) Is this waste intended for fuel blending? ☐ Yes* ☒ No
 *If yes, Heat value (BTU/lb.) Chlorine (%) Water (%) Solids (%)
 10.2) Is this waste intended for reclamation? ☐ Yes ☒ No (S-Gulch Sample required for all reclaim waste streams)

Section 11 - Constituent Information

Please identify your waste constituents from these four categories: Underlying Hazardous Constituents (UHC's), Volatile Organic Hazardous Air Pollutants (VOHAP's), Volatile Organic Compounds (VOC's) and Toxic Release Inventory Constituents (TRI)

| Constituent | Concentration | UHC? | Constituent | Concentration | UHC? |
|-------------|---|------|-------------|--|------|
| DOSE | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| LEAD | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | <input type="checkbox"/> Yes <input type="checkbox"/> No | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |

Please see Section 11 of the EQ Resource Guide for a list of UHC's, VOHAP's and VOC's. For a complete list of TRI constituents, please refer to 40 CFR 372.63.

Section 12 - Certification

I certify that all information (including attachments) is complete and factual and is an accurate representation of the known and suspected hazards, pertaining to the waste described herein. I authorize EQ's Resource Team to add supplemental information to the waste approval file, provided I am contacted and give verbal permission. I authorize EQ's Resource Team to obtain a sample from any waste shipment for purposes of verification and confirmation. I agree that, if EQ approves the waste described herein, all such wastes that are transported, delivered, or tendered to EQ by Generator or on Generator's behalf shall be subject to, and Generator shall be bound by, the attached Standard Terms and Conditions.

Generator Signature X. Hays, Jr. Draper Printed Name Hays M. Drapp

Company Title Date Warren Steel Holdings 3/12/07

The generator's signature MUST appear on the EQ Waste Characterization Report. If the generator has authorized a third party to certify this document, a written notice (on generator letterhead) must accompany this submittal. Although the EQ Resource Team is authorized to make certain modifications to the information provided on this form, the addition or removal of waste codes and waste constituents must be documented by the generator.

JI-WS-08

STORM WATER POLLUTION PREVENTION PLAN

for

Warren Steel Holdings, LLC
4000 Mahoning Avenue
Warren, Ohio 44483

Prepared by:

Horizon Environmental Corporation
4771 – 50th Street SE, Suite One
Grand Rapids, MI 49512

September 1, 2011

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FIGURES

- Figure 1 Site Location Map
Figure 2 Facility Layout

APPENDICES

- Appendix A NPDES Permit
Appendix B Site Spill History
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CERTIFICATION

**Storm Water Pollution Prevention Plan
Warren Steel Holdings, LLC
4000 Mahoning Avenue
Warren, Ohio 44483**

I hereby certify that this Storm Water Pollution Prevention Plan has been prepared for the Warren Steel Holdings, Warren facility and to the best of my knowledge this plan has been prepared in accordance with good engineering practices. I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

Warren Steel Holdings, LLC - Management

Mark Trapp, Chief Operating Officer

Date

Storm Water Pollution Prevention Plan - Administrator

Chris Green, EHS Manager

Date

1 GENERAL FACILITY INFORMATION

Name of Facility: Warren Steel Holdings, LLC

Facility Address: 4000 Mahoning Avenue
Warren, Ohio 44483

Standard Industrial classification (SIC) Code: 3312

Responsible Official:

Name: Mark Trapp
Title: Chief Operating Officer
Telephone: 330-847-0487
Mailing Address: 4000 Mahoning Avenue
Warren, Ohio, 44483

Owner: Warren Steel Holdings, LLC

Operator: Warren Steel Holdings, LLC

Permit Information:

Type: NPDES
Permit Application Number: OH0011207
Ohio EPA Permit Number: 3ID00050*JD
Effective Date: August 1, 2008
Expiration Date: January 31, 2012
Number of Storm Water Outfalls: 1
Receiving Waters: Mahoning River

Technical/ Emergency Contact:

Name: Chris Green
Title: EHS Manager
Telephone: 330-847-0487

2 OVERVIEW

2.1 INTRODUCTION

Warren Steel Holdings, LLC ("WSH") owns and operates the steel mill located at 4000 Mahoning Avenue in Warren, Ohio (the "Facility"). This storm water pollution prevention plan ("SWPPP") covers the operations at the Facility. It has been developed to meet the requirements of the Facility's National Pollutant Discharge Elimination System ("NPDES") Permit No. 3ID00050*JD presented in **Appendix A**. The SWPPP describes the Facility and its operations, identifies potential sources of storm water pollution at the Facility, recommends appropriate best management practices ("BMPs") or pollution control measures to reduce the discharge of pollutants in storm water runoff, and provides for periodic review of this SWPPP.

The Facility is located in the City of Warren, Trumbull County, Ohio. The site location is illustrated on **Figure 1**. WSH operates an electric arc furnace ("EAF"), ladle refining furnace ("LRF"), molten metal caster, and ancillary supporting equipment at the Facility. Scrap metal is brought on site, melted in the EAF and refined in the LRF, cast into bars, and then shipped offsite. Process water from the Facility is collected and transferred into treatment lagoons. Storm water that is not absorbed into the ground is also accumulated into the lagoons. The combined process and storm water in the lagoons is processed in the Facility's waste water treatment plant and either returned to the Facility for use within steel production operations, or discharged to the Mahoning River under the provisions of the NPDES permit.

2.2 OBJECTIVES

The goal of the storm water permit program is to improve the quality of surface waters by reducing the amount of pollutants potentially contained in storm water runoff being discharged. All storm water discharges associated with industrial facilities that discharge to waters of the state are required to prepare an SWPPP as part of their NPDES permit.

The objective of this SWPPP is three-fold:

1. To identify potential sources of storm water pollution at the Facility;
2. To describe BMPs that are to be used at the Facility to minimize pollutants entering the storm water; and
3. To provide other elements such as, but not limited to, a Facility inspection program, site compliance evaluation program, and a record keeping and reporting program that will help the Facility minimize pollutants in the storm water.

3 STORM WATER POLLUTION PREVENTION TEAM

The storm water pollution prevention team includes management personnel to support and oversee the program, an administrator to assure the plan is followed and maintained, and supervisory and operating personnel to implement the program activities.

The member(s) of the team and their primary responsibilities (i.e. implementing, maintaining, record keeping, submitting reports, conducting inspections, employee training, conducting the annual compliance evaluation, testing for non-storm water discharges) are as follows:

| Name & Title | Responsibility |
|--|--|
| Mark Trapp Chief Operating Officer | Management support for development, implementation, and maintenance of SWPPP. |
| Chris Green EHS Manager | Administration of SWPPP. General oversight of SWPP activities and SWPP team. SWPP team personnel training. Annual comprehensive inspection. Generate and submit reports. |
| Terry Krebs Area Supervisor | Maintenance and repair programs. Oversight of structural and non-structural controls. |
| Waste Water Treatment System Operators | Periodic inspections and recordkeeping. Assist in annual comprehensive inspection. SWPPP incident response activities. Periodic SWPPP review. Testing for non-storm water discharges, as required. |

4 POTENTIAL SOURCES OF POLLUTANTS

4.1 FACILITY LAYOUT

Figures 1 and 2 present a layout of the Facility showing the following features:

- Property boundaries.
- Buildings and other permanent structures.
- Storm water discharge outfalls.
- Outlines of drainage areas contributing to each outfall.
- Areas of vegetation.
- Impervious surfaces (roof tops, asphalt, concrete, etc.).
- Names and locations of receiving waters.
- Structural control measures to reduce pollutants in the storm water runoff.
- Locations where major spills or leaks have occurred.
- Location of the following operations that are exposed to precipitation and/or storm water runoff: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; production areas; and storage areas.
- Locations where significant materials are exposed to storm water.

4.2 INVENTORY OF EXPOSED MATERIALS

A waste water treatment system is located at the Facility. WSH uses the treatment system to treat both process water and collected storm water, before it is discharged under its NPDES permit. The boundaries of the Facility are graded to prevent storm water from leaving the property through discharge points not associated with the waste water treatment system. Storm water falling on the site is absorbed into the ground surface in unutilized and unpaved portions of the Facility. Storm water falling on impervious surfaces or running off in the production areas is collected in the roof drains and surface catch basin system and ultimately discharged to the Facility's waste water lagoons, along with non-contact process cooling waste water used at the Facility. The water that has passed through the waste water lagoons is subsequently treated to remove suspended solids and dissolved metals and then either returned to the process for reuse, or discharged from Outfall 005 under the NPDES permit.

The potentially polluting materials WSH uses at the Facility are described below and located on Figure 2.

Gasoline and diesel fuel are stored outdoor at the Facility. There are two large aboveground fuel storage tanks with capacities of 10,000 and 20,000 gallons. These two tanks are empty and have been rendered inoperable. There are four smaller aboveground fuel storage tanks, one 3,000 gallon tank and three 1,000 gallon tanks. The 3,000 gallon tank and two of the 1,000 gallon tanks contain diesel fuel. The remaining 1,000 gallon tank contains gasoline. All four of these tanks are double walled, horizontal storage tanks.

Carbon, lime, and metallic alloys used in the steel production operations are stored indoors in the warehouse area and melt shop to minimize the potential for contact with storm water.

Oils are stored in totes and drums indoors to minimize the potential for contact with storm water. There are two main storage locations: the tool room in the melt shop and the compressor building.

Process water treatment chemicals are stored in drums, totes and fixed tanks inside the US Filter building. These chemicals are used to treat the noncontact cooling water and spray water in the melt shop. These chemicals are stored indoors and are not exposed to rainwater except during unloading operations.

Waste water treatment chemicals are stored indoors and outdoors in tanks, totes and drums at the wastewater treatment building. There are two outdoor storage tanks. The first tank is approximately 5,000 gallons and contains ferric chloride (FeCl_3). The second tank is used for sulfuric acid, but is currently not in use. These tanks are located in a concrete secondary containment area.

Waste roll-offs are located around the Facility for the collection of refuse. There are three to five roll-offs located at the Facility at a given time. The roll-offs are covered whenever waste material is not being disposed.

The **scrap yard** contains piles of ferrous scrap for use in the steel production operations. All scrap materials are inspected upon arrival at the Facility for oily residue or particulate contamination, and rejected prior to final delivery if found to be unacceptable. The piles in the scrap yard are maintained to minimize the effects of rainwater impacts and runoff.

The **slag yard** contains piles of residual slag from the melt shop until it can be shipped offsite for further use. The piles in the slag yard are maintained to minimize erosion and rainwater runoff.

4.3 LIST OF PAST SPILLS AND LEAKS

A list of oil and other polluting materials that have been spilled or leaked at the Facility from three years before the issuance of the NPDES permit until the present date are included in **Appendix B**. Also included is the date, volume of materials, the exact location of each release, and the actions taken to clean up the materials and/or prevent exposure of the materials to storm water runoff and subsequent contamination of surface waters of the state.

As of the current revision of this SWPPP, no significant spills of polluting materials have occurred.

4.4 SUMMARY OF SAMPLING DATA

The storm water falling on the Facility is either absorbed into the ground or combined with the process waste water and treated to meet the NPDES permit discharge limits before being discharged from the site. Because all the captured storm water is combined with process waste water, and treated before being discharged, there is no sampling data specific to solely the storm water or dedicated storm water discharge points.

4.5 RISK IDENTIFICATION AND SUMMARY OF POTENTIAL POLLUTANT SOURCES

Outdoor loading/unloading of chemicals at the Facility includes the transfer and storage of oil, diesel fuel, and gasoline to and from the storage tanks. Gasoline, diesel fuel, and oil has the potential to be a source of pollutant due to dripping during filling of the tank, dripping when the material is transferred from the tank to the vehicles on site, or leaks or spills from the storage tank. Only the ferric chloride tank loading and storage at the waste water treatment facility occurs totally outside and is potentially exposed to storm water. All other chemical tank (e.g., the bulk process water chemicals at the US Filter building) and container (drums and totes) loading/unloading and storage operations occur within buildings or at loading dock locations, with minimal potential for storm water exposure.

Outdoor storage of ferrous scrap and byproduct slag occurs to the south of the steel production operations. Incoming scrap is subjected to visual inspection for oil and particulate contamination, and rejected if found to be unacceptable, as outlined in WSH's Scrap Management Plan. The slag material is generated as a byproduct of steel production, and results in the storage and processing of the dry, granular material after it has cooled. Both the scrap and slag are maintained in piles and managed in a manner to minimize storm water impacts. Slag processing occurs in a manner to minimize impacts to storm water and to minimize the generation of airborne particulate.

5 STORM WATER MEASURES AND CONTROLS

5.1 NON-STRUCTURAL CONTROLS

The practices outlined herein are specifically intended to reduce the likelihood of polluting materials and storm water interaction, and the subsequent potential for polluting materials entering surface waters of the state. Non-structural controls are generally implemented to address the problem at the source and do not require any structural changes to the Facility. The non-structural controls used at the Facility include:

Good Housekeeping Practices

Good housekeeping practices are designed to maintain a clean and orderly work environment. This will reduce the potential for polluting materials to come in contact with storm water. The following are included in the Facility's good housekeeping practices:

- Routinely inspect material storage and process area floors, cleaning as necessary.
- Routine inspection of paved/unpaved areas for debris and improper storage of materials/equipment.
- Routine inspection of paved/unpaved areas for signs of polluting material impacts.

Preventive Maintenance

Preventive maintenance involves the regular inspection, testing, cleaning and repair of Facility equipment and operational systems. These inspections will help to uncover conditions which might lead to a release of polluting materials. Preventative maintenance inspections and a record of maintenance activities will be maintained at the Facility. The following equipment/activities are included in the preventive maintenance program:

- Monthly inspections of gasoline and diesel fuel tanks.
- Monthly inspections of oil storage areas.
- Monthly inspection of dry material storage areas.
- Monthly inspection of storm water catch basins.
- Monthly inspection of process water treatment plant.
- Monthly inspection of waste water treatment plant.
- Monthly inspection of secondary containment systems.
- Semiannual inspection of Outfall 005 and waste water lagoon areas for erosion and other damage.

Spill Prevention and Response Procedures

Spill prevention and response measures identify areas where potential spills can occur, and identify the accompanying drainage/outfall points. A record of all spills or leaks including a description of the spill and the quality and quantity of storm water discharges due to the spill shall be maintained. The following procedures have been developed for spill response for the Facility.

| Area | Materials Present | Response Action | Outfall |
|--|--|--|---------|
| Gasoline, diesel fuel, and oil storage areas | Fuels and oils | Deploy absorbent booms and absorbent materials to control oil spill or sheen in storm water; replace as needed. | 005 |
| Liquid chemical storage areas | Water and waste water treatment chemicals | Contain spilled liquids within existing containment areas or with temporary berms. Collect and properly dispose of liquids. | 005 |
| Dry materials storage areas | Supersacks and palletted bags of carbon, lime and metallic alloys. | Remove large items of debris. Collect and transfer spilled dry material into an appropriate container. As possible, use the spilled material in process, or manage and dispose of the spilled material in an appropriate manner. | 005 |

Employee Training

Employees in the following departments will receive training in general housekeeping, material management practices, and spill response annually to inform them of storm water pollution measures:

- Shipping and receiving
- Raw materials and scrap management
- Waste water treatment
- Process water treatment
- Maintenance

Sedimentation and Erosion Control

No areas subject to significant erosion have been identified at the Facility. Roadways and unpaved areas of the Facility in active operations areas are monitored and graded as necessary to promote proper storm water runoff. If future erosion problems arise, they will be identified in the inspection report, evaluated, and corrected in a timely fashion.

Management of Runoff

The boundaries of the Facility are graded to prevent storm water from leaving active operational areas of the Facility through uncontrolled outfalls. Storm water falling on the Facility is absorbed into the soil in unpaved areas, or collected in the catch basin system with non-contact cooling process waste water and discharged to the on-site lagoons. Within the lagoons, suspended solids are removed from the waste water via gravity settling and any oil sheen present is removed by the use of surface oil skimming equipment. The combined waste water in the lagoons is further treated in the on-site waste water treatment plant to remove suspended solids and dissolved metals and then either returned to the process for reuse or discharged from Outfall 005 under the provisions of the Facility's NPDES permit.

5.2 STRUCTURAL CONTROLS

The equipment outlined herein are specifically intended to reduce the likelihood of polluting materials and storm water interaction, and the subsequent potential for polluting materials entering surface waters of the state. Structural controls require physical changes and may be implemented at the potential source of polluting materials impact, or at areas remote from the potential source. The structural controls used at the Facility include:

Double Walled Tanks

Double wall-equipped storage tanks are used for gasoline and diesel fuel storage. Each of the double walled tanks is equipped with a visual system to allow monitoring of the interstitial space between the tank walls. Should a leak in the interior tank be detected, the tank can be repaired or replaced before the outer shell could be compromised and result in a release of polluting materials.

Secondary Containment

A concrete secondary containment system is in place around the two outdoor chemical storage tanks (ferric chloride and sulfuric acid) located at the on-site waste water treatment system. If either of these tanks should develop a leak, the spilled chemical will be contained within the secondary containment area until it is detected during normal inspection, resulting in a clean up activity and final management of the spilled material. Rainwater collected in this secondary containment system is treated in the on-site waste water treatment plant.

A concrete secondary containment system is in place around the indoor chemical storage tanks located at the process water treatment system. Spills will be maintained within the secondary containment area until it is detected during normal inspection, resulting in a clean up activity and final management of the spilled material. No rainwater management is necessary with this system.

Containers of liquid polluting materials (e.g., water treatment chemicals, maintenance oils, etc.) are stored inside within process or warehouse areas at the Facility. In these instances, the storage area roof removes the potential for storm water impacts, and the floor and walls of the buildings generally act as a secondary containment system to minimize the potential for any spilled polluting materials to escape the building and be exposed to storm water.

Surface Grading

Roadways and unpaved areas surrounding operating areas are maintained and graded as necessary to minimize storm water erosion and sedimentation. In addition, the Facility boundaries are maintained and graded to minimize the potential for discharge of storm water from active operational areas of the Facility through un-controlled outfalls.

6 NON-STORM WATER DISCHARGES

Outfalls from the Facility that contain storm water runoff are limited to Outfalls 005. The water from Outfall 005 contains both process water and storm water, which has been treated in the on-site waste water treatment system to meet the limits in the Facility's NPDES permit before it is discharged to the Mahoning River. The discharge from Outfall 005 therefore is a result of both storm water and non-storm water sources at the Facility.

The existing Facility NPDES permit also notes the potential for storm water discharge at Outfalls 006 and 007. WSH contends, however, that these two outfalls are not located on the Facility or on property controlled by WSH, and do not discharge storm water runoff generated on the WSH property. The discharge from Outfall 006 appears to be storm water collected from north of the WSH property and discharged to the Mahoning River via an underground, concrete county storm drain line. Outfall 007 appears to drain storm water from a low-lying area to the west of the WSH property via a surface ditch discharge to the Mahoning River. As these discharges are not generated from activities at the WSH property, and therefore WSH can not certify that they contain only storm water. WSH has discussed this issue with Ohio EPA Surface Water Division at the NE District Office and have requested the removal of these outfalls from the Facility NPDES permit during the next renewal period.

7 RECORDKEEPING AND INTERNAL REPORTING PROCEDURES

The Facility NPDES permit requires that records of all preventive maintenance inspections, the annual comprehensive site inspections report, and history of spills and leaks be retained at the Facility. These records must be made available, upon request, to a representative of the Ohio EPA.

Appendix B includes the Facility's spill and leak history. **Appendix C** includes sample forms that may be used to maintain records for housekeeping inspections and activities, preventative maintenance, and comprehensive inspections. The sample forms are an example of the type of information to be recorded and maintained, but more specific or alternative forms can be developed and maintained by WSH personnel, as appropriate.

8 COMPREHENSIVE SITE INSPECTION

A comprehensive site inspection will be conducted annually at a minimum by the SWPP plan administrator, or an employee designated by him. It will consist of a visual inspection of:

- The evidence of, or the potential for, polluting materials to enter the storm water drainage system, including the liquid and solids materials in container storage areas, gasoline and diesel fuel tanks, the process water treatment building, and the waste water treatment plant and lagoons;
- Structural management measures (i.e., double-walled tanks, secondary containment, site grading and lagoon integrity) and sediment control to ensure they are operating correctly;
- The equipment needed to implement the SWPPP, such as spill response equipment, to make sure it is available should it be needed; and
- The boundaries of the Facility to identify areas of erosion or sedimentation that could indicate the release of storm water from the Facility through uncontrolled outfalls.

If updates or changes to the description of the potential sources of pollution or the control measures at the Facility as written in the SWPPP are necessary, based on the results of the inspection, the revision shall be completed within two weeks of the date of the inspection. As required, the Facility shall provide for implementation of the changes to the plan in a timely manner, but no more than 12 weeks from the date of the inspection.

A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken as a result of the of the inspection shall be made. The report shall be signed by a responsible corporate official and retained with the SWPPP for at least three years.

FIGURES

APPENDICES

APPENDIX A

NPDES PERMIT

APPENDIX B

SITE SPILL HISTORY

LIST OF SPILLS AND LEAKS AT THE FACILITY

[illegible]

APPENDIX C

SAMPLE RECORDKEEPING FORMS

GOOD HOUSEKEEPING INSPECTION

Date: _____

Time: _____

Inspected by (printed): _____

Signature: _____

| AREAS INSPECTED | OBSERVATIONS | ACTIONS TAKEN |
|---|--------------|---------------|
| Parking Areas | | |
| Production Areas | | |
| Grounds (around active operating areas, in general) | | |
| Diesel Fuel and Gasoline Storage Tanks | | |
| Liquid Container Storage areas | | |
| Indoor Dry Materials Storage | | |
| Scrap Yard | | |
| Slag Yard | | |
| Process Water Treatment Area | | |
| Waste Water Treatment Area | | |
| | | |
| | | |
| | | |

PREVENTIVE MAINTENANCE

Date: _____

Time: _____

Inspected by (printed): _____

Signature: _____

[illegible]

COMPREHENSIVE INSPECTION CHECKLIST

Date: _____ Time: _____

Inspected by (printed): _____

Signature: _____

| AREAS INSPECTED | OBSERVATIONS | ACTIONS TAKEN |
|-----------------------------------|--------------|---------------|
| Outfall 005 | | |
| Property Boundaries | | |
| Production Areas | | |
| Grounds (in general) | | |
| Parking Lots | | |
| Gasoline and Diesel Fuel Tanks | | |
| Liquid Container Storage Areas | | |
| Indoor Dry Materials Storage | | |
| Scrap Yard | | |
| Slag Yard | | |
| Process Water Treatment Area | | |
| Waste Water Treatment Area | | |
| | | |

Include checklist within annual comprehensive inspection report and maintain on file for a minimum of three (3) years.

EMPLOYEE TRAINING

Date of Session: _____

Time: _____

Trainer : _____
(printed)

(Signature)

Attendees (names, printed):

Signature:

Topics Covered: _____

RECORDS CLASSIFICATION FORM FOR REGION V
RCRA RECORDS

Today's Date: 5/4/16
Site Name: Warren Steel Holdings
ID Number: OHR 000 007 773
Date(s) of Documents: 2013-2016
Type(s) of Document: RCRA Enforcement

Quantity of Documents: No. of Box(es) _____ No. of Folder(s): 1

Sensitive: CBI Room N/A Enforcement Sensitive (Red Folder) N/A

Documents can go to Federal Record Center: Yes ☒ No ☐
(Documents from FRC can be recalled in 48-72 hours)

Submitted by: Jamie Paulin

Telephone Number: 6-1771

Comments: Still looking for green
card in this letter. Feel free to
call if you come across it.

Thanks!

Jamie

LAND AND CHEMICALS DIVISION

Type of Document: NOV

Name of Document: Warren Steel Holdings

| | <u>NAMES</u> | <u>DATE</u> |
|--------------------|----------------------|-------------------------------|
| AUTHOR: | <u>Jamie Paulin</u> | <u>12/16/15</u> |
| APA: | <u>[Signature]</u> | <u>01/20/20/16</u> |
| SECTION CHIEF: | <u>[Signature]</u> | <u>11/21/16</u> |
| BRANCH CHIEF: | <u>Jim So 60</u> | <u>11/21/16</u> |
| DIVISION APA: | <u></u> | <u></u> |
| DIVISION DIRECTOR: | <u></u> | <u></u> |
| OTHERS: <u>ORC</u> | <u>Terry Brangan</u> | <u>01/12/16</u> <u>TB</u> |
| DRA: | <u></u> | <u></u> |
| RA: | <u></u> | <u></u> |

RETURN TO: Jamie Paulin

PHONE: 61771

COMMENTS:

State notice sent 01/11/16



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

JAN 21 2016

CERTIFIED MAIL 7009 1680 0000 7648 6910
RETURN RECEIPT REQUESTED

Corporate Creations Network Inc.
Registered Agent for Warren Steel Holdings, LLC
119 East Court Street
Cincinnati, Ohio 33410

Re: Notice of Violation
Compliance Evaluation Inspection and Sampling Event
OHR 000 007 773

Dear Corporate Creations Network Inc.:

On September 17 and September 18, 2013 representatives of the U.S. Environmental Protection Agency and representatives of the National Enforcement Investigations Center (NEIC) inspected the Warren Steel Holdings, LLC facility located in Warren, Ohio (Warren). As a "large quantity generator" of hazardous waste, Warren is subject to the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.* (RCRA). The purpose of the inspection was to evaluate Warren's compliance with certain provisions of RCRA and its implementing regulations related to the generation, treatment and storage of hazardous waste. A copy of the inspection report is enclosed for your reference.

Based on information provided by Warren, EPA's review of records pertaining to Warren, and the inspector's observations, EPA has determined that Warren has unlawfully stored hazardous waste without a permit or interim status as a result of Warren's failure to comply with certain conditions with which a generator must comply in order to qualify for a permit exemption under Ohio Admin. Code 3745-52-34(A)-(C) [40 C.F.R. § 262.34(a)-(c)]. EPA has identified the generator permit exemption conditions with which Warren was out of compliance at the time of the inspection in paragraphs 1- 6, below.

Many of the conditions for a RCRA permit exemption incorporate independent requirements that apply to interim status hazardous waste management facilities that treat, store, or dispose of hazardous waste under Ohio Admin. Ch. 3745-65 [40 C.F.R. Part 265] (TSD requirements). When a hazardous waste generator loses its permit exemption due to a failure to comply with an exemption condition that incorporates a TSD requirement from Ohio Admin. Code Ch. 3745-65, the generator: (a) becomes an operator of a hazardous waste storage facility; and

(b) simultaneously violates the corresponding TSD requirement that applies to interim status facilities (or an analogous requirement that applies to permitted treatment, storage or disposal facilities in Ohio Admin. Code Ch. 3745-54 [40 C.F.R. Part 264]). The generator exemption conditions identified in paragraphs 4 – 6 all incorporate independent TSD requirements from Ohio Admin. Code Ch. 3745-65.

Accordingly, each failure of Warren to comply with these generator exemption conditions is also a violation of the corresponding requirement in either Ohio Admin. Code Ch. 3745-65 [40 C.F.R. Part 265] (if the facility was in existence as of November 19, 1980, and thus should have had interim status), or Ohio Admin. Code Ch. 3745-54 [40 C.F.R. Part 264] (if the facility came into existence after November 19, 1980, and thus should have had a storage permit).

Finally, EPA has determined that Warren violated RCRA requirements related to hazardous waste reports and to universal waste, as described in paragraphs 7 and 8, below.

NON-COMPLIANCE and VIOLATIONS

At the time of the inspection, Warren was out of compliance with the following “large quantity generator” permit exemption conditions:

1. Date When Each Period of Accumulation Begins

Under Ohio Admin. 3745-52-34(A)(2) [40 C.F.R. § 262.34(a)(2)], a large quantity generator must clearly mark each container holding hazardous waste with the date upon which each period of accumulation begins.

At the time of the inspection, Warren maintained two roll-off boxes, storing K061 hazardous waste (emission control dust from the primary production of steel in electric arc furnaces), that were not marked with the date upon which each period of accumulation of hazardous waste began.

One of the roll-off boxes was full and ready for pick-up and the other roll-off box was partially full and contained overflow from a previous collection box that had already been shipped for disposal.

2. Hazardous Waste Container Labeling

Under Ohio Admin. 3745-52-34(A)(3) [40 C.F.R. § 262.34(a)(3)], a large quantity generator must label or clearly mark each container holding hazardous waste with the words, “Hazardous Waste.”

At the time of the inspection, Warren was storing K061 hazardous waste in two roll-off boxes, mentioned in item 1 above, that were not marked with the words, “hazardous waste.” One of the roll-off boxes was full and ready for pick-up and the other roll-off box was partially full and contained overflow from a previous collection box that had already been shipped for disposal.

3. Accumulation of Hazardous Waste Only in Containers, in Tanks, on Drip Pads or in Containment Buildings

Under Ohio Admin. Code 3745-52-34(A)(1) [40 C.F.R. § 262.34(a)(1)], a large quantity generator may accumulate hazardous waste on-site, provided that the waste is placed only in containers, in tanks, on drip pads or in containment buildings.

At the time of the inspection, Warren was accumulating K061 hazardous waste on the ground near the K061 collection area:

Dr. Brad Venner, an NEIC statistician, conducted a statistical analysis of the laboratory data. Dr. Venner concluded that elemental concentration patterns in soil are consistent with contamination by electric arc furnace (EAF) dust. A three-profile non-negative matrix factorization model is consistent with the presence of EAF dust in soil samples ranging from 0.5 to 28 percent. *See*, NEIC Compliance Investigation report, pages 14, 15 and 16, Tables 4, 5, and 6; and appendix E. *See*, Dr. Brad Venner's memo regarding statistical analysis.

The generator permit exemption conditions identified below in paragraphs 4 through 6 are also independent TSD requirements violated by Warren, as noted.

4. Failure to Minimize Possibility of Unplanned Releases of Hazardous Waste

Under Ohio Admin. Code 3745-52-34(A)(4) and Ohio Admin. Code 3745-65-31 [40 C.F.R. § 262.34(a)(4); 40 C.F.R. § 265.31], a large quantity generator must maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. The analogous independent requirement for facilities that came into existence after November 19, 1980 is Ohio Admin. Code 3745-54-31 (40 C.F.R. § 264.31).

At the time of the inspection, Warren failed to minimize the possibility of such an unplanned release of hazardous waste by accumulating K061 hazardous waste on the ground near the K061 loading and collection area; and the K061 loading and collection area, collection boxes, and transfer equipment were dusty, unconfined, open to the elements and not maintained.

5. Weekly Inspections

Under Ohio Admin. Code 3745-52-34(A)(1) and 3745-66-74 [40 C.F.R. § 262.34(a)(1)(i); 40 C.F.R. § 265.174], a large quantity generator that stores hazardous waste in containers must comply with the applicable requirements of subpart I, Use and Management of Containers for hazardous waste placed in containers. Specifically, at least weekly, the owner or operator must inspect areas where containers are stored. The analogous independent requirement for facilities that came into existence after November 19, 1980 is Ohio Admin. Code 3745-55-74 (40 C.F.R. § 264.174).

At the time of the inspection, Warren was not conducting weekly inspections of the K061 collection and storage areas.

6. Training

Under Ohio Admin. Code 3745-52-34(A)(4) and 3745-65-16(A); [40 C.F.R. § 262.34(a)(4); 40 C.F.R. § 265.16(a)], facility personnel of a large quantity generator of hazardous waste must successfully complete a program of classroom instruction or on-the-job training that teaches facility personnel to perform their duties in a way that ensures the facility's compliance with requirements of RCRA. This program must be directed by a person trained in hazardous waste management procedures, and must include instruction that teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. The analogous independent requirement for facilities that came into existence after November 19, 1980 is Ohio Admin. Code 3745-54-16(A) [40 C.F.R. § 264.16(a)]. Facility personnel must successfully complete this training program within six months after the date of their employment or assignment to a facility or to a new position at a facility, and must take part in an annual review of this initial training thereafter. *See*, Ohio Admin. Code 3745-52-34(A)(4) and 3745-65-16(B) and (C) [40 C.F.R. §§ 262.34(a)(4); 40 C.F.R. § 265.16(b) and (c)]; the analogous independent requirement for facilities that came into existence after November 19, 1980 is Ohio Admin. Code 3745-54-16(B) and (C) [40 C.F.R. § 264.16(b) and (c)].

With respect to the training program, a large quantity generator must maintain the following documents and records at its facility:

- a. The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job;
- b. A written job description for each position at the facility related to hazardous waste management;
- c. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position at the facility related to hazardous waste management; and
- d. Records that document that the training or job experience described above has been given to and completed by facility personnel.

See, Ohio Admin. Code 3745-52-34(A)(4); 3745-65-16(D) [40 C.F.R. §§ 262.34(a)(4) and 265.16(d)]; the analogous independent requirement for facilities that came into existence after November 19, 1980 is Ohio Admin. Code 3745-65-16(D) [40 C.F.R. § 264.16(d)].

At the time of the inspection, Warren facility personnel had not successfully completed a program of classroom instruction or on-the-job training that teaches facility personnel to perform their duties in a way that ensures the facility's compliance with requirements of RCRA.

Warren did not have and was unable to provide in response to a request a list of each position at the facility related to hazardous waste management and the name of the employee filling such position(s).

At the time of the inspection, Warren did not have and was unable to provide in response to a request a written description for each position related to hazardous waste management at the facility.

At the time of the inspection, Warren did not have and was unable to provide in response to a request a written description of the type and amount of introductory and continuing training given to employees with duties related to hazardous waste management.

At the time of the inspection, Warren had not conducted annual review of the initial training required and had not conducted training within six months after the date of employment for new employees.

Summary: By failing to comply with the conditions for a permit exemption, above, Warren became an operator of a hazardous waste storage facility, and was required to obtain an Ohio hazardous waste storage permit. Warren failed to apply for or obtain such a permit. Warren's failure to apply for and obtain a hazardous waste storage permit violated the requirements of RCRA and Ohio Admin. Code 3745-50-45 and 3745-50-41 [40 C.F.R. §§ 270.1(c), and 270.10(a) and (d)]. Any failure to comply with a permit exemption condition that incorporates an independent TSD requirement from Ohio Admin. Code Ch. 3745-65 is also an independent violation of the corresponding or analogous TSD requirement.

OTHER VIOLATIONS

Warren also violated the following generator requirements:

7. Hazardous Waste Reports

Under Ohio Admin. Code 3745-52-40(B); [40 C.F.R. § 262.40(b)], a large quantity generator must keep a copy of each Biennial Report and Exception Report for a period of at least three years from the due date of the report.

At the time of the inspection, Warren had no record of the hazardous waste reports submitted to the Ohio Environmental Protection Agency (OEPA) for the last three years.

8. Universal Waste Requirement

Under Ohio Admin. Code 3745-273-13(D)(1) [40 C.F.R. § 273.13(d)(1)], a small quantity handler of universal waste must place any universal waste mercury-containing lamps in a closed container.

At the time of the inspection, Warren was not storing waste fluorescent light bulbs in a closed container. At least two containers labeled "Universal Waste," were open during the inspection.

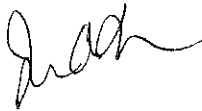
SUMMARY

At this time, EPA is not requiring Warren to apply for an Ohio hazardous waste storage permit so long as it immediately establishes compliance with the conditions for a permit exemption outlined in paragraphs 1-6, above.

According to Section 3008(a) of RCRA, EPA may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both. Although this letter is not such an order under Section 3008 of RCRA and is not a request for information under Section 3007 of RCRA, 42 U.S.C. § 6927, we request that you submit a response in writing to us no later than thirty (30) days after receipt of this letter documenting the actions, if any, which you have taken since the inspection to establish compliance with the above conditions and requirements. You should submit your response to Jamie L. Paulin, U.S. EPA, Region 5, 77 West Jackson Boulevard, LR-8J, Chicago, Illinois 60604.

If you have any questions regarding this letter, please contact Ms. Paulin, of my staff, at 312-886-1771 or at paulin.jamie@epa.gov.

Sincerely,



GJ/V Gary J. Victorine, Chief
RCRA Branch

Enclosure

cc: Teri.Finfrock@epa.ohio.gov

RELEASED
DATE 4/29/19
RIN # 2019-001607
INITIALS Sjn

ENFORCEMENT CONFIDENTIAL - FOIA EXEMPT - DO NOT RELEASE



United States Environmental Protection Agency
Office of Enforcement and Compliance Assurance
Office of Criminal Enforcement, Forensics and Training

National Enforcement Investigations Center

NEIC

NEICVP1053E01

**RESOURCE CONSERVATION AND RECOVERY ACT
COMPLIANCE INVESTIGATION**

Warren Steel Holdings, LLC
Warren, Ohio
NEIC Project No.: VP1053

July 2014

Project Manager:

Charlie Smith FOR
Jamie Iatropulos, Physical Scientist

Other Contributors:

Carrie Middleton, Environmental Scientist
Don Smith, Chemist
Brad Venner, Statistician
Jennifer Suggs, Principal Analytical Chemist

Prepared for:

EPA Region 5
77 W. Jackson Blvd. LR-8J
Chicago, Illinois 60604

Authorized for Release by:

Charlie Smith FOR
Suzanne Schulman, Civil Services Section Chief

NATIONAL ENFORCEMENT INVESTIGATIONS CENTER
P.O. Box 25227
Building 25, Denver Federal Center
Denver, Colorado 80225

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APPENDICES (*NEIC-Created Documents)

- A *NEIC Field Investigation Photographs (76 pages)
- B *XRF Narrative and Data Summary (1 page and supporting Excel® file)
- C *Chain of Custody Record (2 pages)
- D *NEIC Receipt for Samples (2 pages)
- E *Sample Locations and Lead Concentrations Map (1 page)
- F *Sample Locations and Zinc Concentrations Map (1 page)

**This Contents page shows all of the sections contained in this report
and provides a clear indication of the end of this report.**

INTRODUCTION

At the request of U.S. Environmental Protection Agency (EPA) Region 5, EPA's National Enforcement Investigations Center (NEIC) conducted a Resource Conservation and Recovery Act (RCRA) compliance investigation of the Warren Steel Holdings, LLC facility located at 4000 Mahoning Avenue, Warren, Ohio 44483 (Warren Steel). Warren Steel is a melt shop and casting facility, producing carbon and alloy steel continuously cast rounds.

The investigation objective was to identify possible mismanagement and release of K061 dust from the loading and storage area. K061 dust is a waste particulate material generated during the steelmaking process and is also known as electric arc furnace (EAF) dust. K061 is listed as a RCRA hazardous waste. This work involved sampling the K061 dust from inside the loading area (e.g., K061 collection box for disposal) and from soils potentially contaminated with K061 dust in the vicinity of the K061 loading and storage area of the facility.

All tests are accredited under the laboratory's ISO/IEC 17025 accreditation issued by the ANSI-ASQ National Accreditation Board/FQS. The NEIC scope of accreditation includes three major categories: field sampling, field measurements/monitoring, and laboratory measurements. The accreditation certificate number is AT-1646.

FACILITY BACKGROUND

Warren Steel was founded in 2001 and is headquartered in Warren, Ohio. According to the company website, Warren Steel occupies 390-plus acres of land and produces approximately 800,000 metric tons of product annually. It is a producer and supplier of high-quality carbon and alloy steel continuously cast products. Warren's engineered products are currently used in a variety of different industries, including aerospace, mining, construction, automotive, and agriculture. Warren Steel is a large quantity generator of hazardous waste. Warren Steel has a generator identification number: U.S. EPA ID No. OHR000007773. **Figure 1** is a Pictometry International Corporation aerial image of the Warren Steel facility.



**Figure 1. Site aerial image
Warren Steel Holdings, LLC
Warren, Ohio**

ON-SITE INSPECTION SUMMARY

Introduction

NEIC conducted the on-site inspection of Warren Steel on September 17 and September 18, 2013. The field team included Jamie Iatropulos (J. Iatropulos, project manager) and Don Smith (D. Smith) from NEIC, as well as Jamie Paulin (J. Paulin) and Kathy Triantafillou (K. Triantafillou) of EPA Region 5.

Credentials were presented to Joe Ford (J. Ford) and Joel Pyle (J. Pyle), environmental health and safety managers, during the opening meeting on September 17, 2013. Terry Krees (T. Krees), baghouse operator and wastewater operator, and Tim Marleno (T. Marleno), baghouse operator and maintenance worker, also were present for the inspection. An exit meeting was held on September 18, 2013, between the field team and J. Ford and J. Pyle, to discuss preliminary inspection observations. Photographs taken by the field team are located in **Appendix A**.

Inspection Activities

Warren Steel representatives provided a walk-through tour of the facility and process areas, process descriptions, and documentation/records pertaining to the investigation. The field team assessed Warren Steel's compliance with RCRA requirements particularly related to K061 dust loading, handling, and disposal. The assessment incorporated the interviews of facility personnel, including environmental health and safety managers and baghouse operators; detailed discussions and field observations of the K061 handling area; and a records review.

The field team conducted sampling of Warren Steel's active K061 collection box, as well as the area surrounding the K061 handling area of the facility, to determine Warren Steel's compliance with RCRA requirements.

FIELD SAMPLING SUMMARY

Sampling Activities

All samples were collected from the K061 loading and storage area of the facility (Figure 2).



Figure 2. K061 loading and storage area (sampling location)
Warren Steel Holdings, LLC
Warren, Ohio

J. Iatropulos used a telescoping pole and dipper cup to collect samples from stations S01, S02, and S03 at the active K061 collection box. Upon initial collection, each sample was placed into a resealable plastic bag. Each sample was then emptied into an aluminum pan, mixed, and split into two plastic resealable plastic bags using a plastic disposable scoop. Alternating scoops were placed into the two bags to make up two resealable plastic bags per sample collection. One bag was retained by NEIC; the other bag was given to Warren Steel as a split sample.

The sampling area for sample stations S04 – S17 was first determined by establishing a starting point location. The starting point was chosen to be the sign at the end of the active K061 collection box. From the starting point location, the field team measured 30 feet to the east (direct left) and 30 feet to the west (direct right); doing this established a 180-degree range. The field team then determined a 60-degree angle from the starting point, as well as a 140-degree angle, and marked these points at a 30-foot distance from the starting point. By creating these points, the field team established sampling areas A, B, and C. The field team repeated this method at a 100-foot distance from the starting point to establish sampling areas D, E, and F. A generalized sampling area was established beyond a 100-foot distance from the starting point for sampling area G, which equated to the area between the 61-degree and 140-degree points. Within each sampling area, 30 marker flags were dispersed randomly to establish sampling points in which the portable X-ray fluorescence (XRF) Innov-X XRF Model DSW4000 was used

to collect *in situ* readings of select elemental constituents. The Innov-X XRF was set up in the back end of a vehicle that was parked close to the areas of investigation. The XRF measurements were made *in situ* at random spots within the established sampling area. A plastic cover was used to protect the detector and tube window from external contamination. Standard and blank measurements were made at regular intervals. A summary of the XRF results and quality assurance measurements is included in **Appendix B**. Based upon those readings, sampling points within each sampling area were selected for sample collection. **Figure 3** shows the sampling design for stations S04 – S17.

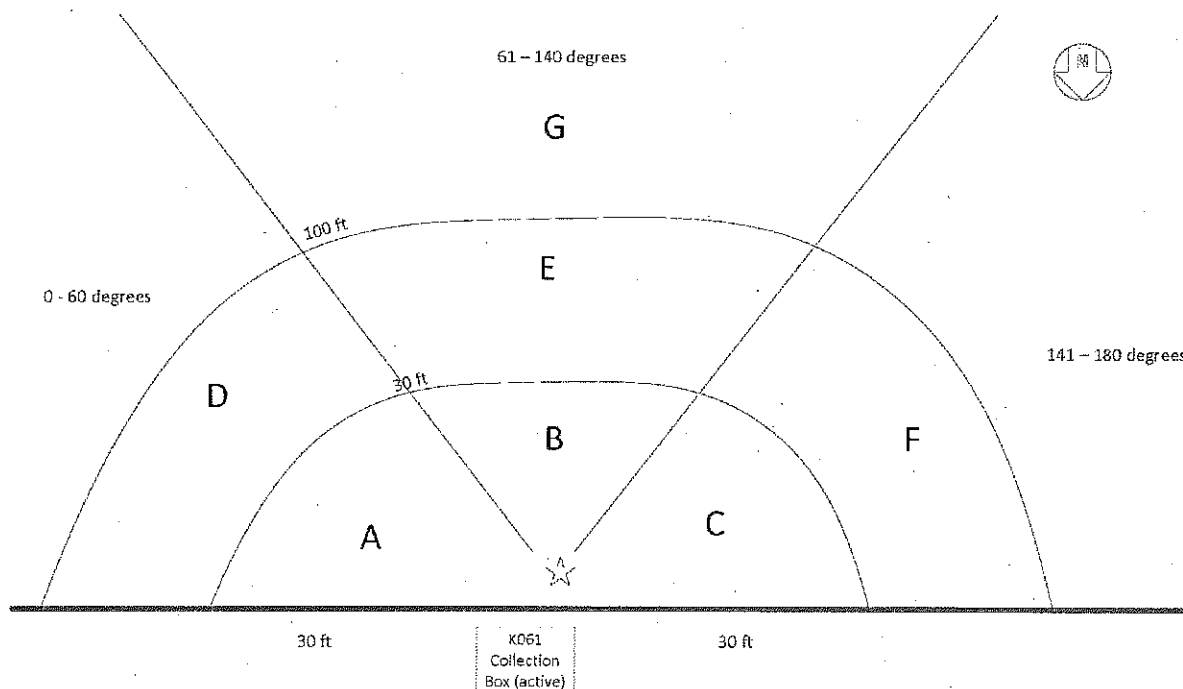


Figure 3. Sampling design for stations S04 – S17¹
Warren Steel Holdings, LLC
Warren, Ohio

At each of sample stations S04 – S17, the field team used a new craft stick to collect material from the surface in a circular area surrounding the sample station. The sample material was placed into an aluminum pan and mixed with the craft stick to homogenize the sample before splitting the material into two resealable plastic bags (one for NEIC; one for Warren Steel).

¹ Not to scale. Star represents sign at end of K061 collection box (starting point). Measurements were completed using a metal tape measure and compass. String was used to establish a visual outline of the sampling areas.

The sample from S18 was collected from a waste pile located in sampling area G. The sample from station S18 is considered a sample of opportunity. NEIC collected the sample to determine if the waste pile was RCRA characteristic for toxicity. The sample from station S18 was collected with a new, disposable plastic scoop. The sample material was placed into an aluminum pan and mixed with the plastic scoop to homogenize the material before it was split into two resealable plastic bags. The aluminum pan was either washed out or replaced between the collection of material at each sample station.

Sampling Report

Table 1 summarizes NEIC field sampling. J. Iatropulos collected all of the samples. The samples and chain of custody records (COC) for all the samples were delivered to the NEIC principal analytical chemist (PAC) for this project, Jennifer Suggs (J. Suggs), at the NEIC laboratory in Denver, Colorado; the COC is included in **Appendix C**. NEIC collected split samples for Warren Steel at each sample location, and the receipts of these samples are included in **Appendix D**.

Table 1. FIELD SAMPLE SUMMARY
Warren Steel Holdings, LLC
Warren, Ohio

| NEIC Sample Station No. ^{1, 2} NEIC Tag No. ³ | NEIC-Designated Sample Station Location Sample Coordinate Location (Latitude N, Longitude W) ⁴ | NEIC Sample Collection Date Time (hours) Sampler | Sample Collection Method Sampling Device Used for Collection Sampling Device Used to Split Sample | NEIC Field Description of Sample NEIC Sampling Photographs/ Photographer (Appendix A) |
|--|--|--|---|--|
| S01 NE34718 NE34719* | K061 Collection Box 41.26958 -80.848399 | 09/17/2013 1305 J. Iatropulos | Grab Dipper cup and telescoping pole Plastic scoop and aluminium pan | Fine, brown, dust-like material IMGP0458 IMGP0459 J. Paulin |
| S02 NE34720* NE34721 | K061 Collection Box 41.26958 -80.848399 | 09/17/2013 1307 J. Iatropulos | Grab Dipper cup and telescoping pole Plastic scoop and aluminium pan | Fine, brown, dust-like material IMGP0458 IMGP0459 J. Paulin |
| S03 NE34722* NE34723 | K061 Collection Box 41.26958 -80.848399 | 09/17/2013 1308 J. Iatropulos | Grab Dipper cup and telescoping pole Plastic scoop and aluminium pan | Fine, brown, dust-like material IMGP0458 IMGP0459 J. Paulin |

Table 1. FIELD SAMPLE SUMMARY
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Warren, Ohio

| NEIC Sample Station No. ^{1,2} NEIC Tag No. ³ | NEIC-Designated Sample Station Location Sample Coordinate Location (Latitude N, Longitude W) ⁴ | NEIC Sample Collection Date Time (hours) Sampler | Sample Collection Method Sampling Device Used for Collection Sampling Device Used to Split Sample | NEIC Field Description of Sample NEIC Sampling Photographs/ Photographer (Appendix A) |
|---|--|--|---|--|
| S04 NE34724* NE34725 | A1 41.269561 -80.848339 | 09/18/2013 1136 J. Iatropulos | Grab Craft stick and aluminum pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0471 K. Triantafillou |
| S05 NE34726* NE34727 | A5 41.269499 -80.848394 | 09/18/2013 1145 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Dark-brown dirt-like material with organics IMGP0472 K. Triantafillou |
| S06 NE34728* NE34729 | A30 41.269531 -80.848349 | 09/18/2013 1157 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0473 K. Triantafillou |
| S07 NE34730* NE34731 | B1 41.269550 -80.848427 | 09/18/2013 1213 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0474 K. Triantafillou |
| S08 NE34732* NE34733 | B6 41.269527 -80.848465 | 09/18/2013 1224 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0475 K. Triantafillou |
| S09 NE34734* NE34735 | B12 41.269509 -80.848427 | 09/18/2013 1235 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0476 K. Triantafillou |

Table 1. FIELD SAMPLE SUMMARY

Warren Steel Holdings, LLC

Warren, Ohio

| NEIC Sample Station No. ^{1, 2} NEIC Tag No. ³ | NEIC-Designated Sample Station Location Sample Coordinate Location (Latitude N, Longitude W) ⁴ | NEIC Sample Collection Date Time (hours) Sampler | Sample Collection Method Sampling Device Used for Collection Sampling Device Used to Split Sample | NEIC Field Description of Sample NEIC Sampling Photographs/ Photographer (Appendix A) |
|--|--|--|---|--|
| S10 NE34736 NE34737* | C30 41.269569 -80.848498 | 09/18/2013 1256 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0477 K. Triantafillou |
| S11 NE34738 NE34739* | C18 41.269557 -80.848546 | 09/18/2013 1306 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0478 K. Triantafillou |
| S12 NE34740* NE34741 | C28 41.269541 -80.848505 | 09/18/2013 1318 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0479 K. Triantafillou |
| S13 NE34742* NE34743 | E3 41.269412 -80.848465 | 09/18/2013 1552 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Damp, dark-brown dirt/mud-like material IMGP0482 K. Triantafillou |
| S14 NE34744* NE34745 | E1 41.269376 -80.848373 | 09/18/2013 1608 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Damp, dark-brown dirt/mud-like material IMGP0483 K. Triantafillou |
| S15 NE34746* NE34747 | E28 41.269360 -80.848589 | 09/18/2013 1622 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0484 K. Triantafillou |

Table 1. FIELD SAMPLE SUMMARY
Warren Steel Holdings, LLC
Warren, Ohio

| NEIC Sample Station No. ^{1, 2} NEIC Tag No. ³ | NEIC-Designated Sample Station Location Sample Coordinate Location (Latitude N, Longitude W) ⁴ | NEIC Sample Collection Date Time (hours) Sampler | Sample Collection Method Sampling Device Used for Collection Sampling Device Used to Split Sample | NEIC Field Description of Sample NEIC Sampling Photographs/ Photographer (Appendix A) |
|--|--|--|---|--|
| S16 NE34748 NE34749* | E11 41.269413 -80.848415 | 09/18/2013 1643 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Fine, brown, dust-like material IMGP0485 K. Triantafillou |
| S17 NE34750* NE34751 | G4 41.269322 -80.848285 | 09/18/2013 1652 J. Iatropulos | Grab Craft stick and aluminium pan Craft stick and aluminium pan | Rocky, brown, dirt-like material IMGP0486 K. Triantafillou |
| S18 NE34752 NE34753* | G18 41.269212 -80.848506 | 09/18/2013 1722 J. Iatropulos | Grab Craft stick and aluminium pan Plastic scoop and aluminium pan | Rocky, black, dirt-like material IMGP0487 K. Triantafillou |

¹ Samples from stations S01 – S18 were each placed into a resealable plastic bag.

² D. Smith used the Ludlum Model 3 Survey Meter (serial No. 142962) to monitor the radiation level of each sample collected prior to shipment to NEIC. No levels were detected above background.

³ * indicates split sample given to facility.

⁴ Global positioning system (GPS) coordinates were collected by K. Triantafillou with the Trimble GeoXH unit (serial No. 4721455370) for samples from stations S04 – S13. GPS coordinates were collected by K. Triantafillou with the GPS 12 XL 12 Channel hand-held unit (serial No. 35316615) for samples from stations S14 – S18. The GPS coordinates were reviewed, and minor adjustments made using high-resolution imagery (3/20/2012 from Pictometry International) by J. Iatropulos and Carrie Middleton of NEIC. For stations S01 – S03, the locations were interpolated using the georeferencing information from the high-resolution imagery. The coordinates are in decimal degrees and World Geodetic Survey 1984 (WGS84) datum.

The locations of the NEIC samples are shown in **Appendices E and F**, which also show the range of values for the NEIC laboratory analyses of lead and zinc, respectively.²

² The lead and zinc maps are not to scale. Sample locations on both maps are approximated to the actual sample location where the samples were collected during the NEIC site visit.

LABORATORY ACTIVITIES

SAMPLE DELIVERY AND RECEIPT

Eighteen solid samples, collected by J. Iatropulos, were delivered via FedEx to the NEIC laboratory for analysis. Three samples were labeled as K061 dust. One sample was collected from a waste pile, and the remaining samples were soil samples. The samples were collected from Warren, Ohio, in Trumbull County. The soil samples are U.S. Department of Agriculture (USDA) restricted soils due to the presence of Japanese beetles. All samples were shipped together, so all samples were managed as restricted soils. Photographs were taken after opening the shipping container to show the careful packaging of the restricted soil samples. The photographs and a photograph log were saved on a compact disc, which is in the project files. All samples were handled in accordance with the NEIC operating procedures *Evidence Management*, NEICPROC/00-059R3, and *USDA Requirements for Soil Samples*, NEICPROC/02-001R3. **Table 2** summarizes the delivery and receipt associated with these samples.

Table 2. LABORATORY SAMPLE DELIVERY AND RECEIPT
Warren Steel Holdings, LLC
Warren, Ohio

| Event | Date | Comments |
|-----------------|--------------------|---|
| Shipment | September 23, 2013 | One large, locked shipping case was shipped, via FedEx, by J. Iatropulos (tracking No. 528977117835). |
| Receipt at NEIC | September 24, 2013 | Locked shipping case arrived at NEIC and was received by J. Suggs at 1:30 pm. Eighteen solid samples were unpacked and inspected by J. Suggs; no damage or custody issues were observed. Photographs were taken to show the careful packaging of the restricted soils. J. Suggs verified and signed the chain of custody records (N13724 and N13725), and the samples were stored in a small locking, waterproof case within the J. Suggs' laboratory cart and that was secured with a resettable combination lock. |

ANALYTICAL PROCEDURES AND ANALYSTS

The NEIC laboratory was requested to perform elemental analysis on all of the samples and toxicity characteristic and leaching procedure (TCLP, EPA SW-846 Method 1311) extraction and analysis on the sample from the waste pile (sample from station S18). Samples were unpacked, visually inspected for any signs of insect contamination, and initial weights were recorded. Portions of samples were dry-heat treated at 110 degrees Celsius (°C) for 16 hours in accordance with NEICPROC/02-001R3 to decontaminate the samples prior to aqua-regia digestion. For the waste pile sample, a portion was dry-heat treated prior to aqua-regia digestion and a portion was not treated so that it could be used for TCLP extractions. All remaining sample materials were secured in J. Suggs' laboratory cart and clearly marked as USDA restricted soils. All analyses were conducted in accordance with the NEIC quality system and

were performed by NEIC personnel. Analytical procedures and analysts are summarized in Table 3.

Table 3. ANALYTICAL PROCEDURES AND ANALYSTS
Warren Steel Holdings, LLC
Warren, Ohio

| Procedure | Analyst |
|--|---|
| <i>Physical Description/Phase Separation</i> , NEICPROC/00-045R3 | Jennifer Suggs |
| <i>USDA Requirements for Soil Samples</i> , NEICPROC/02-001R3 | Jennifer Suggs Cyndy Lemmon |
| <i>Toxicity Characteristic Leaching Procedure</i> , EPA SW-846 Method 1311 | Cyndy Lemmon |
| <i>Aqua-Regia Digestion (for Solids)</i> , Appendix A of <i>Elemental Analyses</i> , NEICPROC/00-062R5 | Theresa Morris Bradley Miller Richard Helmich |
| <i>Optima 5300 Operating Procedure</i> , Appendix C of <i>Elemental Analyses</i> , NEICPROC/00-062R5 | Cyndy Lemmon Bradley Miller Theresa Morris |

ANALYTICAL RESULTS

Analytical results from the TCLP extraction of the sample from the waste pile did not indicate the presence of metals at concentrations of interest for the RCRA characteristic of toxicity. TCLP results are maintained in the project files.

Analytical results from the aqua-regia digestion and analysis by inductively coupled plasma-optical emission spectrometry (ICP-OES) are presented in **Tables 4 through 6** in milligrams per kilogram (mg/kg). Results were calculated from the dry weight of the sample and are average values from duplicate and triplicate analyses, with the exception of two samples. The samples from stations S01 and S10 were prepared as analytical triplicates during the aqua-regia digestion. For the sample from station S01, all subsample replicates were analyzed in triplicate ($n = 9$), and for the sample from station S10, two of the subsample replicates were analyzed in triplicate ($n = 6$). Values reported for those two samples are the average of all the analyses. Samples analyzed in duplicate were from stations S11, S15, S16, and S17. Mercury was not present above the detection limit for all stations, and bismuth and yttrium were not present above the detection limit for the sample from station S17.

Table 4. LABORATORY ANALYTICAL RESULTS FOR SAMPLES FROM STATIONS S01 – S06
Warren Steel Holdings, LLC
Warren, Ohio

| Sample Station No., NEIC Tag No., and Analytical Results | | | | | | | | | | | | |
|--|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|
| Element | S01 | | S02 | | S03 | | S04 | | S05 | | S06 | |
| | NE34718 | | NE34721 | | NE34723 | | NE34725 | | NE34727 | | NE4729 | |
| | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation |
| Aluminum | 6920 | 160 | 6390 | 76 | 6990 | 100 | 16300 | 210 | 3410 | 520 | 6590 | 170 |
| Antimony | 141.7 | 3.8 | 143.0 | 2.8 | 146.0 | 3.0 | 66.90 | 0.49 | 63.5 | 1.4 | 86.10 | 0.67 |
| Arsenic | 82.8 | 1.2 | 82.2 | 3.9 | 84.0 | 1.7 | 73.7 | 2.7 | 57.5 | 1.9 | 78.8 | 4.2 |
| Barium | 183.7 | 8.1 | 170.00 | 0.92 | 185.0 | 2.4 | 160.0 | 1.6 | 40.4 | 5.1 | 90.1 | 1.2 |
| Beryllium | 0.86 | 0.02 | 0.84 | 0.02 | 0.88 | 0.03 | 1.79 | 0.05 | 0.45 | 0.01 | 0.93 | 0.03 |
| Bismuth | 12.03 | 0.42 | 15.3 | 2.2 | 13.6 | 2.9 | 98.8 | 1.0 | 4.42 | 0.39 | 103.0 | 1.4 |
| Cadmium | 168.7 | 3.2 | 180.0 | 2.5 | 175.0 | 2.3 | 43.00 | 0.37 | 50.70 | 0.76 | 60.10 | 0.39 |
| Calcium | 69000 | 1000 | 65600 | 660 | 68700 | 750 | 120000 | 1400 | 26500 | 3900 | 45500 | 640 |
| Chromium | 3433 | 76 | 3360.0 | 7.3 | 3440 | 21 | 2520 | 28 | 1890 | 280 | 3050 | 33 |
| Cobalt | 70.9 | 1.1 | 68.5 | 1.1 | 71.10 | 0.85 | 23.20 | 0.16 | 27.60 | 0.36 | 40.40 | 0.74 |
| Copper | 2007 | 15 | 2060 | 26 | 2050 | 53 | 455 | 16 | 445 | 49 | 678 | 21 |
| Iron | 287300 | 3500 | 283000 | 1900 | 290000 | 2100 | 265000 | 2500 | 402000 | 59000 | 463000 | 7200 |
| Lanthanum | 7.73 | 0.32 | 7.27 | 0.14 | 7.76 | 0.29 | 15.80 | 0.16 | 5.15 | 0.20 | 8.42 | 0.31 |
| Lead | 11033 | 58 | 11600 | 82 | 11400 | 85 | 1450 | 14 | 349 | 70 | 1280 | 28 |
| Lithium | 54.1 | 1.6 | 56.0 | 1.1 | 56.30 | 0.09 | 14.60 | 0.75 | 3.88 | 0.88 | 8.39 | 0.46 |
| Magnesium | 46230 | 230 | 45300 | 170 | 46400 | 85 | 36400 | 320 | 4510 | 640 | 13400 | 130 |
| Manganese | 44570 | 310 | 43200 | 430 | 45200 | 470 | 15600 | 150 | 4780 | 710 | 9040 | 100 |
| Molybdenum | 123.7 | 4.0 | 111.0 | 4.1 | 206.0 | 2.6 | 246 | 11 | 260.0 | 3.7 | 536 | 16 |
| Nickel | 205.7 | 2.1 | 203.0 | 3.3 | 206.0 | 1.3 | 649 | 21 | 444.0 | 3.1 | 1560 | 29 |
| Phosphorus | 1397 | 12 | 1380 | 23 | 1390.0 | 8.5 | 612 | 11 | 186 | 12 | 300.0 | 2.8 |
| Silicon | 591.0 | 8.5 | 643.0 | 9.6 | 611 | 15 | 600.0 | 9.2 | 1460 | 110 | 409.0 | 2.6 |
| Silver | 42.53 | 0.60 | 43.40 | 0.54 | 43.10 | 0.79 | 7.22 | 0.12 | 2.94 | 0.06 | 5.45 | 0.14 |
| Strontium | 73.4 | 1.9 | 70.3 | 1.0 | 74.9 | 3.0 | 129.0 | 3.2 | 45.50 | 0.78 | 72.1 | 1.6 |
| Tin | 229.0 | 3.5 | 236.0 | 3.4 | 233.0 | 1.8 | 31.20 | 0.59 | 26.70 | 0.41 | 40.20 | 0.54 |
| Titanium | 422 | 12 | 401.0 | 2.1 | 428.0 | 6.0 | 844 | 11 | 178 | 16 | 322.0 | 7.2 |
| Tungsten | 1433 | 12 | 1480 | 40 | 1450 | 57 | 220 | 11 | 75.3 | 4.0 | 236.0 | 7.5 |
| Vanadium | 163.0 | 3.0 | 158.0 | 4.1 | 162.0 | 5.3 | 210.0 | 6.6 | 65.1 | 1.9 | 102.0 | 4.0 |
| Yttrium | 1.30 | 0.06 | 1.19 | 0.03 | 1.33 | 0.08 | 6.99 | 0.13 | 0.87 | 0.02 | 2.96 | 0.04 |
| Zinc | 113000 | 1000 | 118000 | 870 | 116000 | 1000 | 14900 | 180 | 4580 | 700 | 16900 | 180 |
| Zirconium | 67.1 | 2.6 | 61.80 | 0.78 | 68.0 | 1.5 | 89.4 | 2.0 | 39.80 | 0.59 | 61.2 | 1.2 |

Table 5. LABORATORY ANALYTICAL RESULTS FOR SAMPLES FROM STATIONS S07 – S12
Warren Steel Holdings, LLC
Warren, Ohio

| Sample Station No., NEIC Tag No. and Analytical Results | | | | | | | | | | | |
|---|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|-----------------|--------------------|
| Element | S07 | | S08 | | S09 | | S10 | | S11 | S12 | |
| | NE34731 | | NE34733 | | NE34735 | | NE34736 | | NE34738 | NE4741 | |
| | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Average (mg/kg) | Standard Deviation |
| Aluminum | 11000 | 270 | 9930 | 200 | 9700 | 240 | 8850 | 370 | 10200 | 8230 | 130 |
| Antimony | 80.0 | 2.4 | 66.0 | 1.3 | 74.2 | 1.8 | 81.6 | 2.1 | 69.7 | 77.0 | 3.1 |
| Arsenic | 78.00 | 0.99 | 73.3 | 3.3 | 73.0 | 2.6 | 77.5 | 3.3 | 74.6 | 77.5 | 4.5 |
| Barium | 139.0 | 1.3 | 143.0 | 1.6 | 140.0 | 2.4 | 122.0 | 5.6 | 127.0 | 107.0 | 1.0 |
| Beryllium | 1.17 | 0.04 | 1.11 | 0.04 | 1.19 | 0.04 | 1.02 | 0.02 | 1.02 | 0.83 | 0.04 |
| Bismuth | 35.6 | 1.7 | 33.2 | 1.9 | 16.60 | 0.98 | 41.9 | 1.5 | 28.6 | 23.4 | 1.9 |
| Cadmium | 63.6 | 1.4 | 48.70 | 0.79 | 48.20 | 0.75 | 63.9 | 1.0 | 51.2 | 59.5 | 3.4 |
| Calcium | 82300 | 1500 | 76600 | 1200 | 70900 | 1200 | 73400 | 2600 | 75400 | 60600 | 270 |
| Chromium | 2760 | 53 | 2260 | 24 | 2600 | 48 | 2760 | 120 | 2310 | 2570 | 24 |
| Cobalt | 32.10 | 0.95 | 31.50 | 0.43 | 33.40 | 0.65 | 34.50 | 0.26 | 30.45 | 34.6 | 1.5 |
| Copper | 673 | 10 | 539 | 14 | 521 | 20 | 623 | 25 | 487 | 564 | 17 |
| Iron | 374000 | 5400 | 338000 | 3700 | 384000 | 6200 | 392300 | 9100 | 349000 | 418000 | 2800 |
| Lanthanum | 12.00 | 0.20 | 13.20 | 0.28 | 11.90 | 0.37 | 10.53 | 0.51 | 14.95 | 10.30 | 0.11 |
| Lead | 2140 | 36 | 1250 | 34 | 867 | 28 | 1790 | 82 | 1150 | 1350.0 | 6.1 |
| Lithium | 14.90 | 0.57 | 13.00 | 0.39 | 12.60 | 0.52 | 13.63 | 0.51 | 13.20 | 10.20 | 0.69 |
| Magnesium | 26700 | 430 | 22000 | 140 | 23000 | 420 | 21600 | 690 | 21600 | 19100 | 180 |
| Manganese | 15400 | 240 | 9030 | 120 | 9920 | 180 | 12430 | 470 | 9900 | 10400 | 88 |
| Molybdenum | 379 | 13 | 354 | 11 | 420 | 13 | 426 | 21 | 354 | 425 | 14 |
| Nickel | 951 | 22 | 1120 | 21 | 1200 | 22 | 1083 | 29 | 907 | 1060 | 25 |
| Phosphorus | 468.0 | 7.7 | 412.0 | 4.2 | 365.0 | 5.5 | 407 | 15 | 372.0 | 340.0 | 1.9 |
| Silicon | 343.0 | 2.2 | 411.0 | 6.2 | 578 | 12 | 550 | 70 | 341.0 | 444.0 | 5.7 |
| Silver | 9.17 | 0.23 | 5.39 | 0.17 | 4.38 | 0.17 | 10.9 | 5.3 | 5.65 | 5.31 | 0.31 |
| Strontium | 101.0 | 2.9 | 107.0 | 3.0 | 98.4 | 2.2 | 103.7 | 1.5 | 104.0 | 79.2 | 4.3 |
| Tin | 48.6 | 1.6 | 33.80 | 0.70 | 29.60 | 0.40 | 44.67 | 0.91 | 30.65 | 30.8 | 1.4 |
| Titanium | 528.0 | 6.7 | 453.0 | 5.9 | 492.0 | 9.6 | 448.7 | 3.2 | 439.0 | 399.0 | 7.5 |
| Tungsten | 285 | 11 | 187.0 | 7.8 | 129.0 | 6.6 | 255.0 | 9.2 | 167.0 | 181.0 | 7.2 |
| Vanadium | 133.0 | 4.4 | 101.0 | 3.4 | 113.0 | 5.6 | 131.3 | 5.9 | 115.0 | 114.0 | 6.7 |
| Yttrium | 4.42 | 0.13 | 4.97 | 0.14 | 4.68 | 0.14 | 3.70 | 0.07 | 4.70 | 3.32 | 0.22 |
| Zinc | 20600 | 360 | 13200 | 140 | 8040 | 190 | 18930 | 830 | 11200 | 12000 | 150 |
| Zirconium | 86.0 | 2.2 | 89.2 | 1.7 | 88.4 | 1.8 | 79.6 | 5.7 | 95.1 | 82.3 | 4.3 |

Table 6. LABORATORY ANALYTICAL RESULTS FOR SAMPLES FROM STATIONS S13 – S18
Warren Steel Holdings, LLC
Warren, Ohio

| Element | Sample Station No., NEIC Tag No. and Analytical Results | | | | | | | | |
|------------|---|-----------------------|--------------------|-----------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|
| | S13 | | S14 | | S15 | S16 | S17 | S18 | |
| | NE34743 | | NE34745 | | NE34747 | NE34748 | NE34751 | NE4752 | |
| | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Standard Deviation | Average (mg/kg) | Average (mg/kg) | Average (mg/kg) | Average (mg/kg) | Standard Deviation |
| Aluminum | 13900 | 280 | 13100 | 210 | 6770 | 13600 | 1010 | 17700 | 250 |
| Antimony | 49.10 | 0.46 | 53.0 | 1.4 | 78.4 | 55.4 | 133.0 | 48.3 | 1.3 |
| Arsenic | 74.6 | 4.9 | 76.0 | 1.9 | 88.3 | 75.5 | 108.5 | 62.1 | 1.8 |
| Barium | 177.0 | 1.4 | 172.0 | 1.4 | 89.10 | 162.00 | 13.80 | 123.00 | 0.26 |
| Beryllium | 1.47 | 0.15 | 1.42 | 0.07 | 0.77 | 1.48 | 0.35 | 1.30 | 0.04 |
| Bismuth | 22.4 | 1.2 | 25.7 | 1.3 | 5.3 | 20.5 | < 0.0421 | 20.3 | 1.5 |
| Cadmium | 34.20 | 0.34 | 37.0 | 1.3 | 55.55 | 35.15 | 81.65 | 18.60 | 0.34 |
| Calcium | 112000 | 710 | 107000 | 1600 | 38100 | 101000 | 2250 | 116000 | 640 |
| Chromium | 1670 | 17 | 1810 | 15 | 2430 | 1920 | 4250 | 1950 | 12 |
| Cobalt | 25.60 | 0.27 | 27.20 | 0.80 | 48.55 | 26.00 | 72.35 | 17.10 | 0.50 |
| Copper | 435 | 10 | 472.00 | 0.38 | 658.0 | 396.0 | 941.0 | 218.0 | 2.3 |
| Iron | 249000 | 1900 | 268000 | 2300 | 469000 | 265000 | 733000 | 152000 | 610 |
| Lanthanum | 16.3 | 1.0 | 16.70 | 0.56 | 8.11 | 16.55 | 2.18 | 20.50 | 0.35 |
| Lead | 857 | 15 | 950.0 | 7.4 | 381 | 679 | 75 | 281 | 15 |
| Lithium | 15.4 | 1.4 | 15.00 | 0.71 | 8.59 | 15.50 | 0.35 | 8.94 | 0.18 |
| Magnesium | 27300 | 290 | 25100 | 260 | 11700 | 27800 | 1420 | 36400 | 390 |
| Manganese | 9690 | 110 | 8190 | 120 | 6310 | 9290 | 6420 | 13700 | 65 |
| Molybdenum | 291.0 | 6.2 | 357.0 | 2.7 | 510.0 | 294.0 | 1100.0 | 191.0 | 1.8 |
| Nickel | 867 | 11 | 946.0 | 4.8 | 1570.0 | 874.0 | 3360.0 | 431.0 | 3.2 |
| Phosphorus | 525.0 | 5.3 | 492.0 | 6.1 | 296 | 459 | 199 | 558 | 10 |
| Silicon | 317.0 | 2.5 | 349.0 | 4.6 | 534.0 | 275.0 | 1780.0 | 548.0 | 7.1 |
| Silver | 4.34 | 0.20 | 4.42 | 0.21 | 3.46 | 4.07 | 2.68 | 3.36 | 0.09 |
| Strontium | 152 | 12 | 150.0 | 6.7 | 66.3 | 144.5 | 4.4 | 109.0 | 1.0 |
| Tin | 23.40 | 0.42 | 25.60 | 0.60 | 34.25 | 21.50 | 48.05 | 7.02 | 0.33 |
| Titanium | 589.0 | 6.0 | 550.0 | 3.1 | 257.0 | 621.0 | 56.0 | 850.0 | 2.7 |
| Tungsten | 126.0 | 6.3 | 139.0 | 2.3 | 81.6 | 102.0 | 32.9 | 94.0 | 2.0 |
| Vanadium | 116 | 16 | 109.0 | 8.0 | 87.2 | 124.5 | 104.5 | 269.0 | 6.2 |
| Yttrium | 7.81 | 0.66 | 7.71 | 0.31 | 2.96 | 7.73 | < 0.00467 | 4.55 | 0.07 |
| Zinc | 7940 | 130 | 9420 | 100 | 4500 | 6050 | 524 | 3500 | 47 |
| Zirconium | 99.6 | 8.0 | 99.0 | 3.8 | 58.2 | 106.5 | 44.0 | 94.8 | 1.8 |

DATA QUALITY SUMMARY

Quality control (QC) measures for TCLP metals determinations included matrix matching, blanks, spikes, independent calibration verification (ICV), continuing calibration verification (CCV), and replicate sample analysis. Each extract was measured in triplicate, and the measurement uncertainty was the standard deviation of the triplicate for metals that were over the reporting limit. Since no metals were present at concentrations of interest for the RCRA characteristic of toxicity, analytical results and measurement uncertainty are not listed here and are maintained in the project files.

QC measures for aqua-regia digestions and ICP-OES metals determinations included blanks, spikes, ICV, CCV, and replicate sample analysis. For samples measured in triplicate or more, the measurement uncertainty is the standard deviation. Standard deviations for these samples are listed in **Tables 4 through 6**. For all other samples, which were measured in duplicate, the measurement uncertainty does not exceed 17 percent as calculated from a Type B evaluation using the greatest QC parameter ($30\%/\sqrt{3}$). Boron, potassium, sodium, sulfur, selenium, and thallium were not reported due to poor quality control. There was a low recovery for barium in a standard reference material; this may indicate that reported values for barium in the samples are minimum values. Percent relative standard deviations exceeded quality control criteria for bismuth in two samples, and for aluminum, lithium, lead, and zinc in one sample.